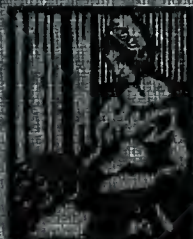
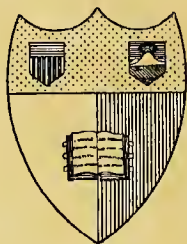


COSTUME DESIGN AND HOME PLANNING



ESTELLE PEEL IZOR

@
T1507
I9
cop.1



New York
State College of Agriculture
At Cornell University
Ithaca, N. Y.

Library

The date shows when this volume was taken.

To renew this book copy the call No. and give to the librarian.

FEB 14 1978

HOME USE RULES

LIBRARY ANNEX

Interlibrary
Loan

Interlibrary
Loan

Books subject to Recall

All borrowers must register in the library to borrow books for home use.

All books must be returned at end of college year for inspection and repairs.

Limited books must be returned within the four week limit and not renewed.

Students must return all books before leaving town. Officers should arrange for the return of books wanted during their absence from town.

Volumes of periodicals and of pamphlets are held in the library as much as possible. For special purposes they are given out for a limited time.

Borrowers should not use their library privileges for the benefit of other persons.

Books of special value and gift books, when the giver wishes it, are not allowed to circulate.

Readers are asked to report all cases of books marked or mutilated.

Do not deface books by marks and writing.

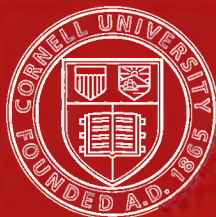
Cornell University Library
TT 507.19

Costume design and home planning.



3 1924 003 595 539

mann



Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

<http://www.archive.org/details/cu31924003595539>

**COSTUME DESIGN
AND
HOME PLANNING**

Costume Design and
Home Planning: by
Estelle · Peel · Izor.
illustrated by · Katherine ·
Porter · Brown · and
Rachel · Taft · Dixon:

2 2 2 2

Atkinson, Mentzer
and Company
Boston, New York,
Chicago, Dallas.

Copyright 1916 by
ESTELLE PEEL IZOR

LIST OF PLATES

COSTUME DESIGN

| Plate | A. Color and Design in Dresses. | PAGE |
|-------|---|------|
| Plate | I. Good Spacing in Striped Materials..... | 3 |
| Plate | II. Arrangement of Tucks..... | 8 |
| Plate | III. Good Design in Plaids..... | 13 |
| Plate | IV. Incorrect Use of Line in Dresses..... | 19 |
| Plate | V. Plans for Fancy Aprons..... | 25 |
| Plate | VI. Utility Aprons | 29 |
| Plate | VII. Rhythm in Laces..... | 33 |
| Plate | VIII. Correct Use of Flower Forms..... | 40 |
| Plate | IX. Imitation of Nature Forms, a Violation... | 50 |
| Plate | X. Violation of Principles in Waists..... | 63 |
| Plate | XI. Structural and Weak Lines in Dresses.... | 85 |
| Plate | XII. Color in Dresses..... | 89 |

HOME PLANNING

| | | |
|-------|--|-----|
| Plate | XIII. The Houses | 95 |
| Plate | XIV. A Room, Redecorated and Furnished by Students | 99 |
| Plate | XV. Floor Plans | 112 |
| Plate | XVI. Living Room, Lucy Fitch Perkins..... | 124 |
| Plate | XVII. Wrong Use of Horizontal Lines..... | 139 |
| Plate | XVIII. Another View of Room, Redecorated and Furnished by Students..... | 146 |
| Plate | XIX. The Balancing of Furniture..... | 153 |
| Plate | XX. The Height of Chair in Relation with Other Objects | 156 |
| Plate | XXI. Large Objects Add Dignity to a Room.... | 162 |
| Plate | XXII. Dining Room | 166 |
| Plate | XXIII. Convenience in a Kitchen..... | 172 |
| Plate | XXIV. A Breakfast-ell in a Kitchen..... | 176 |
| Plate | XXV. Built-in Dressing Table..... | 183 |
| Plate | XXVI. Built-in Closets | 191 |
| Plate | XXVII. Color in a Room..... | 202 |
| Plate | XXVIII. Dining Room—Lucy Fitch Perkins..... | 208 |



CONTENTS

PART I

COSTUME

| CHAPTER | PAGE |
|---|------|
| I. Good Spacing of Parallel Lines: | |
| A. Striped Materials | 1 |
| B. Tucks and Hem | 6 |
| II. Plaids | 10 |
| III. Suitability of Line to Figure | 15 |
| IV. Aprons | 22 |
| V. Rhythm in Laces and Embroidery | 31 |
| VI. Color Theory in Relation to Dress | 36 |
| VII. Color and Complexion | 45 |
| VIII. Self-Criticism | 53 |
| IX. Structural Lines in Waists | 57 |
| X. Appropriateness | 64 |
| XI. Design in Dress Fabrics | 75 |
| XII. Design in Dress | 80 |

PART II

HOME PLANNING

| | PAGE |
|--|------|
| XIII. The Home | 96 |
| XIV. Choice of Site | 104 |
| XV. The Appearance of the House | 114 |
| XVI. Compact Arrangement, a Survey | 127 |
| XVII. Wood Finish | 141 |
| XVIII. Fundamental Principles, I | 149 |
| XIX. Fundamental Principles, II | 160 |
| XX. Choice of Furniture | 169 |
| XXI. Pictures and Floor Coverings | 179 |
| XXII. Color in a Room | 194 |
| To the Teacher | 207 |

COSTUME

The purpose of the book on Costume Design is to help establish in the minds of girls a sane, sensible, well-balanced attitude toward dress, and to help them to realize that beauty is dependent upon principles of Art, as well as to attain a standard by which they may be guided in the artistic, economic, and wise selection of the innumerable common things that their daily life compels them to use.

The subject-matter is presented from the art side alone, and deals with materials and construction only when these elements influence the character of the design. No attempt has been made to present this matter from the viewpoint of either Domestic Art or Commercial Costume Designing, although it should be the basis of both.

The course was begun by another, but has been developed wholly by myself. It is correlated with the Domestic Art Department to the degree that the garments designed in Costume classes are made in the Domestic Art classes.

The author gratefully acknowledges the assistance of Helen R. Lang, who has edited the manuscript of

the book, of Jane Rawls McCrea and Sara Bard, co-workers in the class room in Costume Design, and of others who have contributed in thought, high ideals, and inspiration more than I can hope to acknowledge.

ESTELLE PEEL IZOR.

Indianapolis, Indiana.

“The first purpose
of Clothes was not
for warmth, or de-
cency, but ornament.*
(What changes are-
wrought, not by **
Time, yet in Time!½
Clothes gave us in-
dividuality, distinct-
ions, social polity;
Clothes have-made
men of us.” ❖❖❖❖
• • • • Carlyle-



PLATE A

CHAPTER I

GOOD SPACING OF PARALLEL LINES

STRIPED MATERIALS



From the simplest form of design in wearing apparel through the multitude of details that compose the more complex forms, good spacing is the essential factor. Casual reading and seeing alone will not develop critical powers to a degree sufficient to enable one to judge of fine

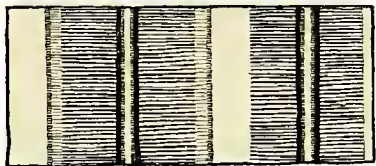
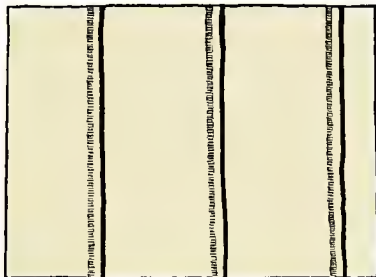
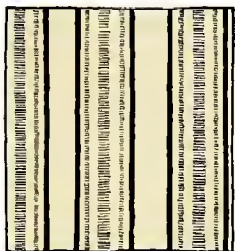
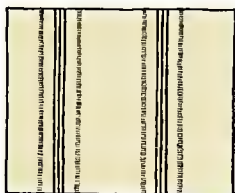
form or color. It is through persistent effort in the doing that one attains good judgment and acquires discriminate taste.

The simplest form of design in its relation to dress is the grouping of such parallel lines as are found in striped materials, to produce good spacing. To put together a few parallel lines with intervening spaces seems a very simple problem, and in a way it is; yet

a designer restricted to straight lines only, has recourse to a wide range of expression in spacing, in texture, and in color, suited to all kinds of materials for wearing apparel; and to secure lines that are finely related involves the fundamental principles of design as well as the ingenuity of the designer.

Since the purpose governs the character of design, the first consideration is always the use to which the material will be put. The design for striped wearing apparel will require a different spacing and arrangement of lines from that intended for striped wall coverings or for upholstery. Silks, wools, and various kinds of wash fabrics furnish ample opportunity for patterns in modest, inconspicuous stripes, or in broad, self-asserting stripes; in quiet and retiring or in bold and striking colors; and in all kinds of stripes that vary in width, tone, or color.

The chief elements in designing a unit for striped materials are good spacing, repetition, and harmony. Repeating lines and spaces of equal width across the surface of a material gives repetition, but not necessarily good spacing. Equal space



Good Spacing for Striped Materials

divisions produce monotony and have no art value. Good spacing demands variety in the proportions of lines, contrast in the width of intervening spaces, or contrast in the depth or delicacy of color-tones, and any combination of these elements that will produce it. Good spacing is the result of a conscious effort to secure good proportions, which give variety and contrast in unity and a sense of balance without equal divisions. A word of caution is needed here, for the effort to avoid monotony may be carried too far. Too great a variety in the width of lines, spaces, or color gives lack of balance, and is as undesirable in design as is uniformity.

Repeating a unit adds enrichment and brings into existence a set of space relations which sometimes presents an entirely new phase of the problem in spacing. Various modifications in spacing and placing may be used to express or to avoid an "up and down" to materials, as in *a* and *b*, Plate I.

Many or few lines may be employed in a unit, but each line must have its own place in the harmony of the whole. If a line, space, or color asserts itself to the detriment of others the result will be discord, not harmony. A design of striped material

which a person of good taste would be willing to wear will have well-cut, finely related spaces which are inconspicuous and unified.

Examples of materials showing good and bad spacing, while differing in texture, weave, and quality, will suggest to the teacher methods and ways of handling the different mediums—lead pencil and pen and ink—in the making of designs by the students, and will also help to develop in the students an appreciation of what constitutes good spacing in striped materials for wearing apparel.

TUCKS AND HEM



The arrangement of tucks and hem in a garment is another practical application of the grouping of parallel lines to secure good spacing. The purpose of the garment and the quality of material to be used determine the delicacy or boldness of the tucks. The contrast in

the width of tucks, and the relation between the width of the tucks and the intervening spaces make the design of the finished garment either distinctive or ordinary.

The possibility of attaining beautiful spacing in the arrangement of tucks is unlimited and in a large measure untried. Designers of the best lingerie waists are giving more attention to this problem. The girl who makes her own garments has a rare opportunity to exercise her sense of appreciation in well-spaced, finely proportioned tucks.

Equal width in tucks or in tucks and spaces produces monotony. Making all tucks different in size will be even more unsatisfactory. There needs to be a degree of symmetry and repetition in the width of spaces and tucks to produce a harmony of the whole. Good spacing depends upon the keeping in balance of the variety and contrasts of proportions of tucks and spaces.

In developing the spacing and tucks for waists and for flounces and sleeves, variety may be secured by

(a) a contrast between the width of the tucks and that of the intervening spaces;

(b) a contrast of tucks with each other in width and arrangement, the intervening spaces being kept uniform in size, as in *a*, *b*, and *c*, Plate II;

(c) a contrast of an entire group to the space between groups, as in *a*, Plate II;

(d) contrasts of individual tucks with the hem;

(e) a contrast of the width of the space between tucks and hem to all the other elements involved (hem, tucks, and spaces between tucks), none of the widths of which it repeats, as in *b* and *d*, Plate II.

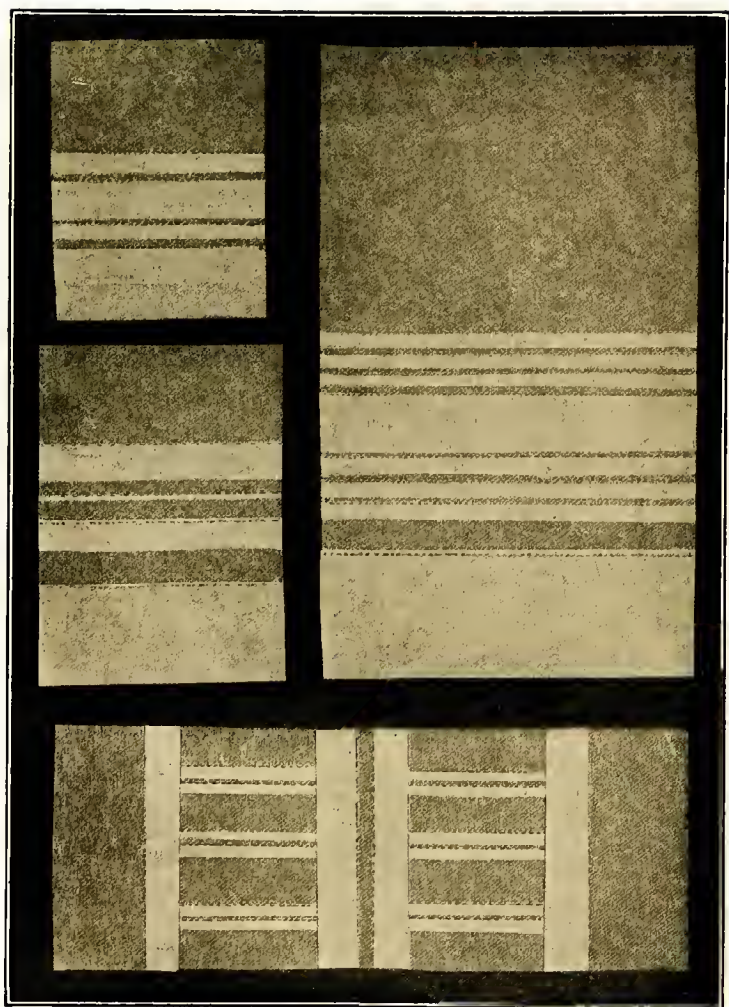


PLATE II

To secure a finer sense of proportion a series of problems may be worked out on drawing paper, a straight line indicating the edge of the tuck and a dotted line the machine stitching, the best design to be selected and folded in Japanese paper. This gives the dexterity and accuracy in finger skill so essential to good workmanship.

CHAPTER II

PLAIDS



Any harmony in design depends upon the use of lines, masses of light and dark, and color. Personal choice marks the design of a student as commonplace or distinctive, for beauty comes only when personal choice results in good spacing, good proportions, and harmon-

ious color. The one who has acquired a fine sense of good spacing will find great interest in producing new arrangements and combinations of parallel lines in two directions, that is, in forming plaids. The breaking of a definite area into equal divisions with horizontal and vertical lines results in monotony, and produces a uniformity undesirable when repeated over yards of surface, as in ordinary checked materials. The beauty of a plaid depends

upon the balancing of unequal spaces which produces well regulated lines, spaces, and color values.

Three main elements are involved in the designing of a plaid, the principles of dominant and subordinate, repetition, and opposition.

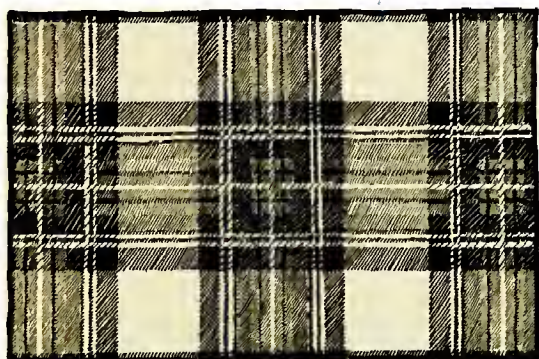
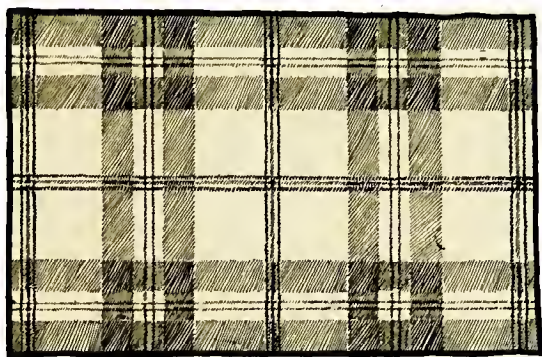
The dominant or central idea is the focus point which holds the attention and to which all else is to be subordinated. The dominant idea may come through a conjunction of well-placed lines, as in *b*, Plate III. It may come through the use of striking or harmonious colors in lines against a neutral background; or it may come through the pronounced color of an empty field with neutral lines subordinated, as in *a*, Plate III. The principle of subordination, which is inseparable from that of the dominant, helps to bring order out of confusion, and simplifies and concentrates the grouping of lines and spaces. The principle of subordination through concentration of lines and the balancing of unequal spaces gives coherence and organization to the plaid.

Repetition which involves parallelism gives enrichment. The regular repetition of lines and spaces produces monotony, while not enough repe-

tition leaves a design empty and meagre. Rhythmical repetition is often produced by the accenting of lines in colors in one direction alone, as is frequently seen in lines running lengthwise in silks. The principle of opposition involves the use of lines and intervening spaces in opposite directions, producing a severe contrast, and includes parallelism. It adds a variety, contrast, and interest in the relation of spaces and lines not found in parallelism alone.

Color is an important factor in the designing of a plaid. A balance of color includes a balance of light and dark. When one color asserts itself above other colors, the harmony is lost. Color emphasizes good proportions and spacing, and as easily points out defects.

A series of exercises for plaids may be developed in various ways, for example, by designing a complete unit or a section of a unit, or by grouping two or four units, thus bringing together a different set of space relations and forming a new unit. Examples of the best Scotch plaids and various weaves of plaid fabrics are invaluable in a classroom. The exercises may be developed in any



• Good Designs for Plaids •

medium,—in pencil, in pen and ink, and in water color or colored crayons on white, grey-toned, or colored papers. The method of handling these mediums may suggest the texture and weave of the material to be represented.

CHAPTER III

SUITABILITY OF LINE TO FIGURE



The fundamental principles of design in their elementary forms lead to the direct application of line to dress. The dominant lines are formed in many ways,—by seams, plaits, folds, areas of other materials, or trimmings. The lines of opposition and of repetition are also found. The dominant lines are frequently found to be horizontal and vertical. It is a well established principle of art that wherever used, horizontal lines emphasize breadth and vertical lines emphasize height. The application of this principle is unfailing in its results whether in painting, architecture, or costume.

The main or structural lines of a dress should be studied carefully in reference to this principle

and its relation to the size and shape of the individual who is to wear the garment. All girls fall into three general classes,—the normal, the stout, and the slender. The normal person will not be considered here, since she is easily dressed. The stout person may be tall or short, and the slender person may vary in the same way. Size is a more important factor than age, and one need never look oversized or undersized if the dress is designed for the individual figure.

In order to bring necessary traits more clearly before a student, an impersonal study of the two abnormal types is imperative. It is a noticeable fact that a stout person invariably chooses for her ideal way of dressing the style most becoming to the slender person, because in her heart she longs to appear like the slender person. But she forgets her own figure. Her face and head are broad and round, and her neck is short and thick. Her shoulders are square and broad. She is full chested, and being full under the arms, necessarily carries her arms akimbo. She is short-waisted and has large hips. Every portion of her person expresses breadth and circumference. If in her ignorance

she uses horizontal lines, she will appear stouter than she really is. Horizontal lines such as are formed by broad belts, broad shoulder effects, ruffles, plaited flounces, or broad trimmings in the waist and skirt will invariably emphasize her breadth. The line of the sleeve ending at the elbow is a continuation of the waist line, and emphasizes breadth where least breadth should be expressed. A very tight blouse as well as one that is very loose and baggy gives the appearance of an added amount of flesh. Coats ending at the hip line and loose flaring capes in plain, plaid, or striped materials increase her apparent width. Broad flat hats trimmed in pronounced horizontal lines add to her breadth. Conspicuous stripes and borders, pronounced plaids, bold designs, and large dots and figures widely separated and strong in color, increase size and attract attention. The stout person needs to use every line that will emphasize her height and apparently decrease her breadth. Long lines, quiet colors, and an unbroken silhouette will be her salvation. The question of wearing a short or long waist line or a full skirt of figured material will depend upon whether the material is soft and

clinging in quality and inconspicuous in design and color, upon the direction of the main structural lines, and upon the silhouette of the figure.

An analysis of the slender person shows her characteristics to be exactly opposite to those of the stout person. The slight woman has a long, slender face and head, and a long, thin, and sometimes bony neck. Her shoulders are sloping and narrow, and her arms are long, slim, and angular, hanging straight by her side. She is flat-chested and very straight, with slight evidence of hips. She needs to emphasize every line in her costume that will appear to increase her breadth. She must avoid vertical directions in main or structural lines and in striped materials in her dress. An unbroken silhouette increasing her apparent height is a detriment to her. Narrow, clinging clothes, close-fitting coats, and small, tall hats trimmed vertically will exaggerate her height and slenderness. She must learn to avoid deep yokes which divide the waist into equal parts, lines which meet in angles over the breast and make her appear hollow-chested, and tight sleeves which emphasize sharp elbows. In every way she must avoid severe angular lines



PLATE IV

in waist, sleeves, skirt, coat, and hat. Horizontal divisions in blouse, sleeves, and skirt will broaden the slender person's figure, and puffs, flounces and frills will increase her breadth and break the severe or angular contour of her figure, as bolero jackets, half-length or preferably longer coats, and broad, low hats with graceful curves will soften her lines. It is ignorance of the principles underlying the use of horizontal and vertical lines in dress that makes caricatures of the stout and the slender person. The violation of these principles will make the wearer ludicrous in the eyes of observers, however she may appear to herself. The fault lies with the wearer's choice and not with the dress. Dresses are designed for particular types of figure, and it is ignorance alone which leads the stout and the slender woman to choose the same style.

Since the purpose of this book is to study the individual, the lay figure is not used at any time. Instead, a knowledge of the proportions and characteristics of the human figure is necessary. Various types of figures can be found in class-rooms, and the lesson may proceed as in pose work, through the study of models. The "head" may be used as

a unit of measurement, as, for example, the number of "heads" high, the number of "heads" to the waist and in the length of the skirt, and the number of "heads" through the shoulders, the waist, and the hips. The length of the arm, the placing of the elbows in relation to the waist, and the perfect balance of the figure by the careful placing of the feet must also be considered. Simplicity in pose and accuracy in measurement will greatly facilitate the work.

When students have gained a degree of judgment and have exhibited increased intelligence in adapting lines to figures, their best drawings may be chosen and with slight alterations be transformed into stout and slender figures. A better judgment and appreciation of the correct and incorrect use of horizontal and vertical lines in dresses will come through the students' designing dresses for these stout and slender figures.

CHAPTER IV

APRONS



The designing of an apron furnishes another definite application of fundamental principles of art to simplified forms. Once more we have a problem in proportion and fine spacing, not only in determining the shape of the apron, but in making good space divi-

sions in relation to the whole and in securing suitability of line to the particular figure which is to wear it. Here, too, a stout person should avoid curves and horizontal lines, while the slender person must discard severe vertical divisions.

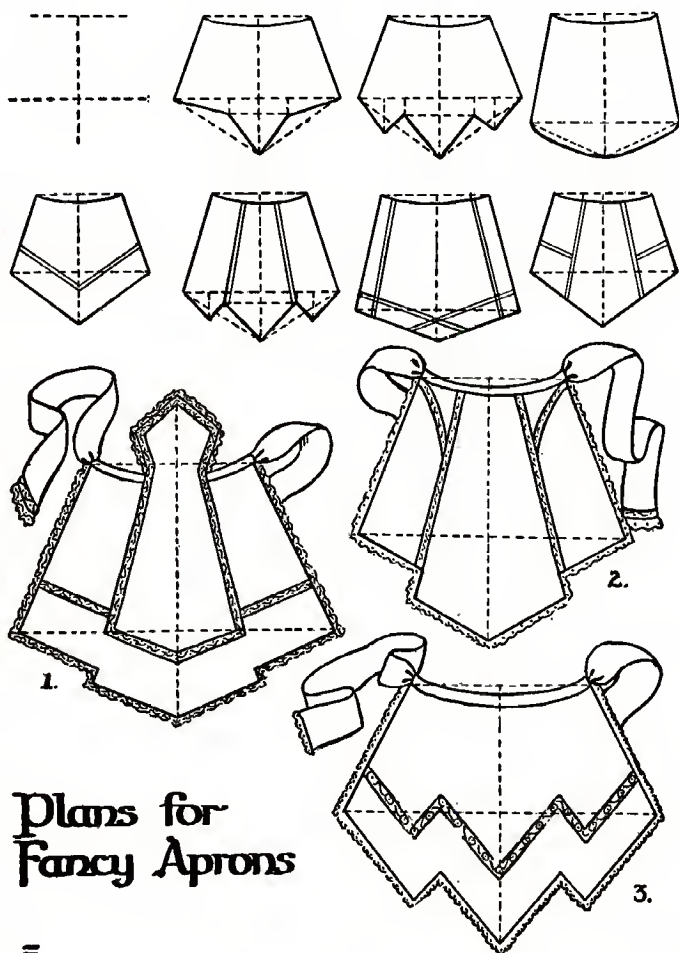
The purpose of the apron determines the choice of materials and influences the character of the design. There are many kinds of aprons from which to choose, each one giving a wide range for

expression in well-proportioned designs and excellent workmanship. Among the various kinds only two that are representative need to be mentioned here,—the small utility apron made of a combination of natural and colored linen with ample pockets which form part of the structural design, and the fancy apron made of organdies and fine lawns with insertions of lace or embroidery which form the design. The purpose of the apron regulates the size. The length of the apron for a person of normal size ranges usually from sixteen to twenty-two inches and the width varies according to the contour and design of the apron. The waist line is usually fourteen inches. Each type of apron is capable of limitless variations, and furnishes opportunity for beautiful space divisions and artistic arrangement.

All plans for aprons are based upon three constructive lines representing the horizontal waist line, a vertical line expressing the greatest length of the apron, and a second horizontal line at the place of greatest breadth, as in *a*, Plate V. The joining of the ends of these lines by means of straight or curved lines gives one the foundation for

all simple aprons and the basic form for more complex styles, as indicated in Plate V, the dotted lines representing the construction lines, and the continuous lines the outlines or general shape of the apron. The contour will vary according to the length of the second horizontal and the position which it occupies upon the vertical, and the nature and direction of the curve or straight line connecting the extremities of these two determining factors. Many variations in angles or curves in the outline at the bottom of the apron may be secured by raising or lowering and by extending or shortening the second horizontal.

The next step in designing an apron is the breaking of the area of the shape into beautiful space divisions, by means of lines representing insertion or different materials or pockets, as in the case of the utility apron. The possibility of infinite variation in arrangement of such spaces makes it unnecessary for any two aprons to be exactly alike. When insertion is used, the variation may be secured by placing the insertion parallel to any part or to all of the outline; by the use of insertion to break a vertical division into unequal spaces, as in a



Plans for Fancy Aprons

narrow central panel with broader ones at each side, or in a broad central panel with narrow sides; by the subdivision of the outer panels into unequal spaces, the line of insertion being kept parallel to the corresponding outline; or by the use of striped or figured dimities or organdies as broad borders repeating the curved, angular, or straight shape at the bottom of the apron, and placing it in with an insertion which adds to the general appearance of the completed article, as in Plate V. Insertion used as lines of repetition and opposition add interest and variety to the design.

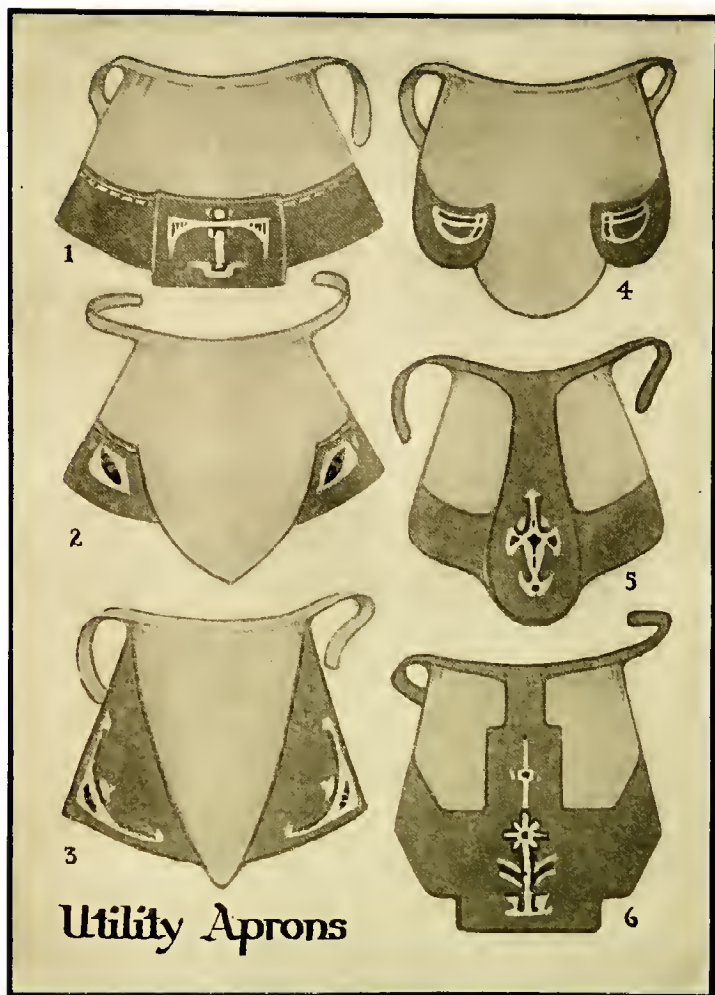
The main element in the utility apron is the pocket, which should be ample enough to retain articles and materials needed in work. The practise of placing pockets upon any apron independently of its design or purpose often violates fixed principles of design. Pockets out of proportion, whether too large or too small, pockets out of place, whether too high or too low, or placed in the angles at the corners of fancy aprons, have no relation to the design as a whole. The placing of pockets is a problem in itself. They must be considered as a distinct element in the design, and must become so

a part of the design as a whole that to remove the pocket would be to mar the appearance of the apron.

The same basic lines that govern the foundation shape of the fancy apron are used in the utility apron. The utility apron is capable of marked variety in the modifications of shape, which comes through the use of one color of material upon another. The space may be broken by the use of different colored materials in pronounced forms or in the use of pockets, which at once become the dominant feature of the design, as in Plate VI.

The quality of materials, their economic adaptability, and their aesthetic values require independent consideration. In the making of the fancy apron daintiness, beauty, and texture as well as price should govern selection. These can be studied from samples of lawns, batistes, dimities, and organdies brought into the classroom. The batistes and organdies are translucent cloths of very fine threads varying in quality, and can be found plain or with small figured designs. The dimities and lawns are fine, light-weight fabrics which are starched and pressed in the process of manufacture, and which when

laundered often lose the original texture and quality. The dimities, which are frequently ribbed and corded in one direction, often split along the thread of the cord, thus rendering the wearing quality questionable. The utility apron, which requires heavier material, may be made of linens or Russian crash of natural color with plain, solid colors forming the main element of the design. Many beautiful colors, such as dull blues, dull rose, mulberry, maroon, olive green, old gold, and russet brown, may be secured in these colors. The colored linens may be used as pockets alone, as in 2, 3, and 4, Plate VI; as complete or partial borders, as in 1 and 2, Plate VI; as the central panel connecting the pockets, as in 5, Plate VI; or merely as a distinct element of design, as in 6, Plate VI. The apron may be further enriched by embroidering upon the colored material a carefully thought-out unit in a simple cross-stitch, outline, or couching stitch, or in a darning stitch with even and uneven length alternating. Since it attracts attention, the embroidery design should be dignified and restrained, and placed near the center of the apron to avoid calling into prominence either by misplacing, or by



multi-colored flosses, the parts that should be subordinated.

When the problem has been developed after the manner indicated, there should follow the drawing of a plan for an apron to the scale of $\frac{1}{4}$ " to 1", and including the indication of the lines of the insertion, as in the small drawings in Plate V. A curved line passing through a point two inches down from the waist on the central vertical line, and returning to the upper extremity of the sides, as in the plans shown in Plate V, will lengthen the waist line and make the apron fit snugly over the hips. The band, which is cut two and one-half inches wide to make it one inch when finished, should end either with the edge of the apron or meet in the center of the back, at which place the ties are to be attached. The tie may vary in width and length according to one's taste. If the design proves satisfactory, a pattern may be cut actual size, inch for inch, allowing $\frac{1}{4}$ " for all seams.

CHAPTER V

RHYTHM IN LACES AND EMBROIDERY



The value of studying design and rhythm in modern machine-made laces and embroideries is of great importance in relation to aprons and in its broader relation to costume. Rhythm is measured movement. It is the keeping of time in art. Rhythm depends upon the ease with which the move-

ment glides from one part to another, each line expressing a continuation of another movement without opposition.

The simplest form of rhythm in laces and embroideries is found in simple scallops of equal length and height. Variety in rhythm is secured when the length of the movement is changed by alternating a long scallop with a shorter one. A compound rhythm is one in which one long scallop

is composed of many smaller ones which themselves sometimes vary in length, as in the lower example in 1, Plate VII. Rhythm is also found in scallops having accented terminals, Plate VII.

In all laces and embroideries which form borders, rhythm, which is an essential element, comes through an orderly recurrence of lines, units, and movements. Rhythm is sometimes shown by progression, that is, by the direction in which disconnected units, dots, or eyelets are placed upon a background, as in 1, Plate VII. More often rhythm is found in one orderly continuous and undulating movement, as in 2, Plate VII.

Besides rhythm two other elements are to be considered, that is, the pattern and its orderly construction, and the contrast of the pattern with the mesh or background. The pattern should be clearly defined, firm in structure, and simple in form. There should be force, clearness, purity, and elegance in the outline of the pattern. Nothing vague or uncertain is desirable. Good designs are elementary in form, expressing only length and breadth without any attempt to express depth, modeling, or shadow. They include geometric



PLATE VII

forms and such abstract forms as baskets, emblems of all sorts, and the decorative use of nature forms which suggest flowers and leaves without actually portraying them, as in Plate IX. Each form should occupy its own space, one by one, not overlapping another and thus cutting off a portion of a form. In laces the pattern of the closely woven forms contrasted with the intervening spaces of mesh-work should give a sense of balance of masses and spaces, and should appear in an orderly, continuous movement with parts subordinated to the more pronounced forms, as in Plate VII. Richness of effect should mark the design, Plate VIII, not profusion, over-crowding, or poverty of ideas.

Weakness in design comes through the introduction of lines that have no structural relation to the pattern and through movements of opposition having no rhythmical connection between adjacent units, as in 3, Plate VII. Vigorous whorls, halting, jerking movement, and the crossing and recrossing of lines give an impression of unrest. Disquieting forms twisting and turning awkwardly, badly shaped forms added to ill-formed groups and imitating nature by modeling rose-petals and leaves, as in

Plate IX, as well as bow knots of ribbon, and trellises with trailing vines, all violate laws of structural design. No amount of elaboration can hide disorderly and misplaced construction. Good design is marked by simplicity, pure lines, and good forms with obvious rhythmical relation of parts to whole. Beautiful, broad surfaces, bold, pure lines, and clearly defined forms contrasting with their backgrounds while lying flat upon the ground, will never weary the eye.

CHAPTER VI

COLOR THEORY IN RELATION TO DRESS



Although the theory of color is a most important factor in dress as well as in other fields of art, it is not well understood, as is testified by the wide range of opinion of various critics as to what constitutes good color instruction. I offer no more than a few sug-

gestions of some well established facts which I have found helpful to students. In Costume, the chief aim of the study of color is to be concrete and to give only that portion of the theory of color which enables one to compare colors discriminately and to select and use harmonious combinations which are at once beautiful and wearable. The effect of color should be considered rather than the science.

The spectrum and the source of color may or may not be discussed, but the question of relative color values is important. The one deals with the admixture of lights, the other with pigments; the one with cause, the other with effect. The student of costume needs to know that the three elements governing color are hue, value, and intensity. Hue is the name or quality by which we distinguish one color from another, as green, blue-green, red, orange, or violet. Value is the amount of light or dark in a color; and intensity is the strength or purity of a color, the quality which determines a bright from a dull one. The painting of the neutral value scale assists in developing a power to distinguish the amount of light and dark in colors. The placing of the smallest possible quantity of each of the six fundamentals, yellow, orange, red, violet, blue, and green, in a color-wheel is serviceable in locating hues and their complementaries at their fullest intensities. It is not necessary for the student to produce either the color scales of any of the fundamentals or the many intermediates in order to distinguish them, for the production of these defeats the effort to create beauty. It fixes indelibly

in the mind of the student the ugliness, crudity, and intensity of pigments, never seen in nature and seldom in manufactured materials. The lasting impressions of these crude colors upon the minds of students at an impressionable age may account for the choice and display of crude and intense color in dress in later years. "A little learning is a dangerous thing," and unless the student can have long and continuous study in the science of color, the production of color scales had better be eliminated. Colored papers reproducing fairly accurate hues and values of the fundamentals and a wide range of intermediate hues can be secured and arranged in scales in five or six values. Such scales are fairly suggestive of the innumerable hues with which the world of costume has to deal.

Emphasis should be placed upon producing beautiful color harmonies, that is, upon producing the dominant, the complementary, the analogous, and the contrasting. We are told that harmony comes through "reconciling differences too crude and oppositions too startling" into such relations as are agreeable to the eye. Harmony can be produced through a wise selection of hues of which

one dominates in quantity, through a contrast in values, and through carefully related intensities.

A dominant harmony is composed of two or more values of one hue. Three consecutive values in a color do not produce harmony any more than do three consecutive tones in music. Harmony will depend upon a contrast of values used in unequal quantities. A dominant harmony for dress may come through neutralizing one or more values and using a small quantity of another value at fullest intensity. If intensity in one value is desired, it may be increased by lowering other values, or by neutralizing without lowering all the values. If too intense, a hue may be reduced by neutralizing it without lowering the value, thus making it greyer but not darker. Violent extremes in values and strong intensities may result in brilliancy, but more often result in crudity and harsh contrasts which are as disastrous as are too great similarity in value and intensity. The mind must be kept alert to values placed in juxtaposition and thus to avoid final results that are petty and uninteresting. It must be borne in mind at all times that the study of color must be directly applicable to costume, and



PLATE VIII

that the final test will be the affirmative answer to, "Is it beautiful? Is it suitable to wear?"

A complementary harmony is a harmony of extreme opposites which is composed of colors that stand opposite each other upon the color-wheel. The production of any two complementaries at their full intensity will not produce harmony. Lowering the value of one or neutralizing it and increasing the intensity of the other may produce harmony. A small quantity of pure intensity in one hue requires a large quantity of its complement in low or neutralized value. When carefully mixed in painting, complementaries neutralize one another, that is, produce a neutral tone. When used in juxtaposition, each emphasizes the intensity of the other. By the use of complementaries, any given color can be neutralized without changing the value, or its value may be changed without materially changing its distinctive hue. A complementary harmony gives opportunity to balance colors, e. g., warm and cool colors, or neutral values and intensities, or high and low values, or two values equally removed from intensity, or values near middle, with or without neutralizing one or both hues. The

charm in this harmony is due to the brilliancy and richness which come through the reconciliation of differences, that is, the widest range of contrasts brought into subdued, glowing harmony.

Analogous harmonies are based on a contrast of values of neighboring hues, that is, hues that are found in close juxtaposition, in which one color plays through adjoining hues, as, for example, green running through GYG, G, GBG, BG, BBG, or orange running through RRO; RO, ORO, O, OYO, YO, YYO. Neither the combination of three consecutive values nor the same value in three adjoining hues will produce agreeable harmony. Analogous harmony depends upon the contrast of hues in different values. It requires thoughtful discrimination in the selection of hues, the effect of contrasted values, and the degree to which they are neutralized. A large variety of hues in colored papers will be useful in increasing knowledge of the variety of hues and in stimulating the imagination to invent distinctive combinations. The deep-toned relationship of values in rich colors makes this harmony the most subtle and most beautiful of all the color harmonies.

Contrasting harmonies include all harmonies found in the range of hues lying between complementary and analogous in the color wheel. In this harmony is found the widest range of color combinations from the most delicate to the richest, from the most sparkling and brilliant to the deepest or duldest, from the most ordinary to the most distinguished. The different ways of producing harmony previously mentioned may be applied here. The mind must be kept alert by the study of the relation of value to intensity. A combination lacking in harmony may be corrected by changing the hue, or removing the intensity without lowering the value of the hue, or neutralizing the value without changing the brightness. The study of the combination of adjacent bright colors in an oriental rug or Japanese textile or print shows how the skill of the worker and his knowledge of color harmony enable him to combine daring and startling contrasts, such as turquoise blue, orange, rose, red, indigo, green, and black, in quiet, peaceful harmony. Colors which are rich and daring when seen separately may be brought together in such a way as to enrich and enhance or subdue each other. A

color sense can not be imparted or passed on from one person to another. Neither can it come through description or formulas. It can be gained only through discreet observation and practise, the basing of one experience upon another, and a never-ending effort to possess better comprehension and appreciation of great beauty and enrichment.

CHAPTER VII

COLOR AND COMPLEXION



In costume the beauty of a color should not be considered alone, but in relation to the effect it has upon the complexion of the person who is to wear it. The instinctive craving for color is natural and should be gratified, but not at the sacrifice of harmonious appearance.

There is no complexion, however attractive or commonplace and uninteresting, but may be improved by a selection of the color best suited to the particular complexion.

Individuals fall into two general types, blonde and brunette. Some of the most familiar types of blondes are the pink and white blonde with delicate, transparent skin and flushed cheeks; the red and cream blonde with more vivid coloring;

the colorless blonde whose hair, complexion, and eyes are monotonously alike; the sallow blonde with sallow complexion in conjunction with medium dull brown, lusterless hair; and the Titian or the red-haired blonde with remarkably clear complexion accompanied by beautiful reddish-copper hair. The combination of the complexion with the various hues of hair, and the color in the eyes which range from china blue to deep violet blue and from grey blue to grey green and hazel brown are what make a person distinctive and interesting. Brunettes are distinguished in a similar manner. There is the genuine brunette with dark skin, hair, and eyes, and flushed cheeks; the fair brunette with cream and scarlet complexion, and blue or brown eyes with dark brown hair; the sallow brunette with black hair and eyes and a sallow skin; the "nut-brown maid" with nut-brown skin and hazel eyes, and with cheeks flushed like dull rose; and the olive brunette with brown skin tinged with clear olive green, flushed cheeks, and mellow, warm brown eyes. There are, of course, many intermediate types of blondes and brunettes.

The wide difference in the complexions of

blondes and brunettes makes it impossible for them to wear the same hues. Each season brings certain popular colors, and blondes and brunettes alike rush for them regardless of the effect these colors have upon their complexion. Color has the same effect upon complexion that certain chemicals do upon water. For example, certain hues of red will bring out the yellow in the face of one blonde, while in the faces of others it emphasizes green or perhaps purple, or makes one ashen, the color of the eye fading and the hair becoming dusty and lusterless. Because of the marked difference in types and because color affects each individual differently, no set rule can be given for the choice of harmonious colors. The right choice of color is largely a matter of individual study.

No more convincing argument can be made for the proper choice of color than the actual application of dress materials of many different colors to the different types of complexion. Choose a group of four or five girls representing as marked types as possible. Try upon each of them in succession, in the presence of the class, dress materials of various hues and values of red, blue, yellow, green,

brown, and violet. The same color upon different types will emphasize or change the color of eyes, hair, and complexion.

Anyone with a complexion verging toward yellow or with pronounced yellow or sallow skin should avoid white and black, both of which bring out yellow in the face. Most pale colors or colors of middle value and strong intensity, such as coral or turquoise, blues, and heliotrope, emphasize yellow. Rich cream or buff counteracts yellow in the face. The sallowness of a complexion verging toward green can be counteracted by the use of grey-green in materials. Certain hues of green have a tendency to bring out pink in a face where a flush is lacking. It is popularly believed that pale people should wear strong colors to impart color to the face. Strong colors exaggerate pallor and sallowness, and leave the hair lusterless and dead. Blondes appear best in modified colors. Only the fairest brunette can wear anything approaching pure hues. Many make the mistake of choosing dress materials according to the intensity of hue instead of the value. It is in the realm of values neutralized or lowered that the most successful dresses are found.

The countless variety of hues neutralized in intensity and raised in value, such as russets, citrines, greyed orange, and dull peach, which bring color to lips and cheeks and hair, makes it possible for the colorless or sallow person to dress in taste and harmony.

It has been erroneously said that the red-haired blonde must never wear blue. Several centuries ago Titian found that certain hues of red hair combined with dull peacock blue-green produced a wonderful harmony. The eyes of the Titian blonde vary from clear blue, deep blue, grey blue, or green blue (never violet-blue) to golden brown. The color of the eyes should determine to what degree the blue or the green should dominate the material. Golden browns which reflect the same golden hue of hair are safe colors though not so distinctive as faded heliotrope, deep apricot, dull apple green, or dull sage, as in Plate XII. The red-haired blonde must always avoid all hues of red, black, milk-white, yellow-brown, or yellow-green, all pure colors.

The brunette with dark hair and skin and flushed cheeks may wear stronger color, but the clearer



PLATE IX

type will require different colors from the sallow. The brunette who rejoices in a good complexion may wear almost any color, except the so-called pastel shades or any greatly modified color. Warm colors, such as deep yellow, sunset yellow, orange yellow, orange red, cardinal, claret, maroon, Indian red, flamingo, and deep poppy-red are sometimes better for brunettes than cool colors. Exuberant red in the face can be counteracted by the use of a similar red in material. The danger lies in not choosing the right hue of red, for there are thousands of hues of reds, varying in kind, quality, and degree. The "nut-brown maid" may be very beautiful or very ugly according to her choice of colors. Requiring combinations entirely her own, she can wear colors suited to few other types, as, for example, dull amber, faded golden brown, nut browns verging toward dull orange, faded apricot, peach blow, dull russets, and citrines, the colors found in wind-blown autumn leaves. The olive brunette may be beautiful in such colors as cafe-au-lait, amber, maize, dull orange, a deep and rich dull rose, and chestnut brown. The use of greens, violets, or blues will emphasize the olive green in her complexion.

The no-type-in-particular girl, who knows her own peculiarities and chooses with care and discrimination only those hues which bring color to her face and glow and interest to her hair, is no less attractive in becoming, harmonious colors than are the others. There is no complexion, whether it be beautiful in the extreme or thoroughly commonplace and uninteresting, that does not require a comprehension of its good qualities and the exercise of good judgment in the selection of colors to make the beautiful more beautiful, and the homely more tolerable.

CHAPTER VIII

SELF-CRITICISM



One of the main purposes of this course is to show that each girl is a distinct problem in herself. Because it is her own figure she is to dress and not a lay figure, she must study the main structural lines in reference to her own size and shape, and the color suited to her own

complexion. I do not ask that girls spend more time in the study of dress in general, but that they spend the time ordinarily given to the subject in a systematic, critical study of self. The danger lies not in too close a study, but in an undirected or misdirected study of self which results in false standards of beauty, color, and cost.

Every girl needs to study herself carefully and analytically in a full-length mirror, searching for

good points as well as for defects. The average person is self-conscious and sensitively morbid regarding her defects, and rarely dwells upon her good features and qualities. Vain people are few in comparison to those who depreciate self. A young girl is usually either painfully conscious of every defect or entirely oblivious of any quality, good or bad, save what she sees in her friends and believes she reflects in herself. The need today is to have a well-balanced, sane comprehension of one's own figure, its defects and its good points, with the knowledge of how to correct the one and emphasize the other. Let each girl study critically the form and character of her head, and the size, shape, and outline of her face and its proportions to the head and to the figure. Let her study analytically the particular color of her complexion; the amount of yellow, cream, brown, or pink in it, the amount of rose, purple-red, or red in her cheeks and lips, or its absence; the kind and quality of the color of her eyes, and the play of color in the light and shadow of her hair. Let her discover the height, breadth, and contour of her figure, and analyze the length, slope, and angle of her shoul-

ders and arms. Are they narrow or broad, sloping or square, angular or full of graceful curves? Are the chest and hips prominent and well-modeled or lacking in contour? Is the waist long or short for the height of the figure? Let her acquaint herself with her own peculiarities and characteristics, which are apparent to the observer. Let her study herself in the same impersonal manner and spirit in which she studies another person or a foreign object that she intends to draw. This will decrease rather than increase vanity, and will bring her to realize that her individuality, whether ordinary or attractive, must be studied carefully if she is to choose with discrimination, lines suited to her figure and color suited to her complexion.

Because she needs to fix more firmly in her mind her own distinctive features and because she has further use for the drawings, the student should make careful and accurate drawings of herself, both front and back views. She should recall the former lesson in drawing the different types of figures and apply this knowledge to the drawing of self. Through actual measurement the normal sized person in normal proportions and action will be found

to be from seven to eight heads high. The usual fashion-plate figure with its exaggerated proportions is not infrequently fourteen heads high. Since very few persons have a fashion-plate figure to dress, the student will presently come to see that her costume will not resemble the pictured pattern, but will be something much more satisfying from every point of view.

CHAPTER IX

STRUCTURAL LINES IN WAISTS



Design in relation to a waist pertains to the orderly arrangement of parts in their relation to the whole. Students learn by experimenting and doing. To acquire the ability to appreciate and arrange lines and forms harmoniously in a waist is to understand in a degree the principles

of order, rhythm, and balance.

The first thing to consider in choosing a waist is the style. Under the guidance of a teacher the student learns to study a fashion book in a systematic way, gaining a power to choose and use the best of any prevailing style and the ability to modify or elaborate the design. Something of the following order will help any student to become the

master rather than the slave of fashions. What main lines were prevalent last season? What are the radical changes this year? What modification of old ideas are to be found? In what parts of the waist are the greatest changes manifest? What are some of the art principles underlying the designing of a waist? To what degree do new styles obey art principles? If they do not conform to such principles, how can they be modified to obey them? A correct answer to these questions will place one well on the way to the construction of design for a waist.

The purpose of the waist governs the choice of the design and the material. The materials for the waist should be considered in relation to the color and quality of the skirt with which it is to be worn. No matter how elaborate the trimming or how fine the material, the fact remains that the waist and skirt are two separate garments and can never appear as one complete whole. Daintiness should mark the quality of materials for lingerie waists, while waists for general service may be of heavier materials. The master of costume planning will be alert to each season's new materials and pre-

vailing styles, and alive to the possibilities of beautiful combinations that the new materials offer.

The principles which govern the designing of a waist are the same principles used in previous lessons. They comprise all the elements of good spacing, that is, the dominant or central idea, that which attracts and holds the attention and around which all else is subordinated; the proportions which secure the balance of unequal spaces; and the enrichment which comes through the application of the principles of repetition and opposition.

The outline of the drawing of self becomes the boundary of a surface that is to be broken into pleasing space relations, thus forming the design. This outline is to be divided into four big space relations—the front or back, the sleeves, the collar, and the girdle—and the harmony of the design will once more depend upon the relation of the parts to the whole. Within this outline the student learns first what constitutes the main structural lines, where to place the line representing the center of the figure as it curves over the chest, how to balance the foreshortened side of the figure with the nearer side, and how to indicate the waist line, which

curves slightly downward in the front and upward in the back view.

The line of the arm eye more than any other line in the waist, gives the keynote to the character and style of the waist. There are waists with normal arm eye and shoulder seams, and others with very large arm eye coming well down on the under-arm seam. There are waists with the drop sleeve with or without shoulder seam; waists without any arm eye or shoulder seam, as in the kimono pattern; and waists with raglan sleeves, the lines of the sleeve cutting across the shoulder and ending at the neck. Whatever its position, the arm eye determines the style of the waist.

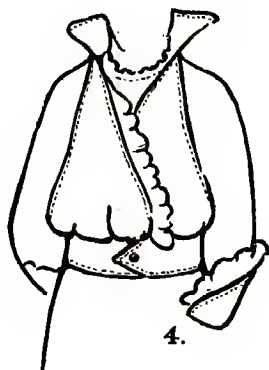
The portion of a waist which is formed by one dominant shape or mass becomes the center of interest, and must be considered in relation to the subordinated forms. The subordination may come through the repetition of the direction of a line or the shape of a surface repeated in a less pronounced way, and also by the right use of opposing shapes or lines. The chief elements used to compose the dominant surface are the placing of the waist opening, the use of the yoke, and the disposition of the trimmings.

The direction of the opening down the front, whether it be straight, angular, or curved, often influences the shape of the surface. The grouping of tucks, folds, frills, or trimmings with their variety of spacing, proportion, balance, and repetition furnishes endless possibilities for the center of interest. Yokes which vary in length, shape, direction, and character are of primary importance whenever used. The success will depend upon the fine balance of proportions, and upon the order and concentration which come through subordination in arranging the parts into unified dominant form, beautiful in shape and enriched by harmonious repetition.

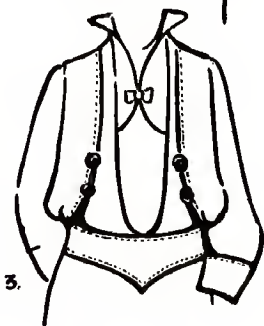
Many violations of principles are found in fashion-plate designs of waists. It is well to recall what has been said in the chapter on *Suitability of Line to the Figure*. It is individual choice which makes one appear deformed and ridiculous or well-dressed. A person with sloping shoulders and narrow chest who chooses for the main lines, lines meeting in angles over the chest, as in 1, Plate X, or lines of shoulder or of sleeves leading to the neck, as in 4, Plate X, will exaggerate the hollow-

ched and narrow-shouldered appearance where maximum breadth should be secured. Lines which break the space into many sections form ugly shapes, as in 2, Plate X. The emphasizing of the breadth of the waist by lines leading from the center of the neck and spreading at the waist, as in 3, Plate X, or the division of a waist into two equal horizontal divisions by either yoke or trimming, as in 5, Plate X, is a mistake on any type of person.

There are endless possibilities in designing any waist, by varying the length of the shoulder and the direction and shape of its outline; by the various ways of arranging and placing groups of tucks, laces, frills, vest, and folds into pleasing space dimensions in the front of the waist; by the subordinate repetition of these elements to enrich and enhance the appearance; and by the character and style of the collar and its corresponding likeness in cuffs and sleeves. The designs will vary according to each individual choice, for the waist offers ample opportunity for creative imagination and inventive power.



Violations of Principles



CHAPTER X

Appropriateness

**"Costly thy habit as thy purse can buy,
But not express'd in fancy; rich, not gaudy;
For the apparel oft proclaims the man."**



Perhaps the most needful work to be done in Costume is to kindle in all minds a sentiment for appropriate dress which fits not only the purpose, but the purse as well. There is always danger that fashion will become the motive power of life. The solution of the difficulty will come when women hold the ethical, the economic, and the aesthetic phases of dress in normal balance.

The desire to manifest beauty is legitimate, for it is God-given. It follows, then, that beauty, comeliness, and grace should be striven for as one strives

for honesty, truth, and sincerity. Beauty in dress is the result of an unerring sense of proportion, whether that relates to size and shape, or pertains to fitness and cost.

Love of adornment has always been the motive power of dress. It manifests itself in one of two ways, either through a sensational desire for embellishment which leads to ostentation and pomp, or through a desire for association with and appreciation of the real qualities of beauty which leads to an enduring satisfaction. Lack of understanding and appreciation of what constitutes beauty is responsible for the immense annual waste of skill and money in the production of audacious, capricious, eccentric, and seductive modes.

Many contributing causes promote false standards of taste and appropriateness: The remarkable facility manufacturers possess for reproducing in rapid succession new fashion movements, the methods of keeping in touch with fashion centers through various publications, the gorgeous and startling displays in shop-windows and at theatres, all tend to dazzle the ignorant girl and evoke in her a desire to possess wealth because of the possibilities it

offers. She is confounded by the excess of ornaments, the pretentiousness and theatricality in design, color, and pattern. She mistakes the extravagant in style for dignity, the loud and dowdy for the rich, and the costly for the beautiful, and so is led to purchase some gown which attracts the attention at once, pleases for the moment, and creates a desire previously unfelt. This extravagance in style and cost establishes a false standard of dress which may exceed the purse of any parent. It fosters a love for the gaudy and conspicuous which often leads to the destruction of moral standards. When extravagance is the standard of dress, beauty is apt to be sacrificed. It is a lack of well-established principles and of the ability to choose wisely that brings ultimate dissatisfaction, unrest, and irresistible desire for change.

Insufficient thought is given to the suitability of the style and material of a garment to its use and purpose. To be sure, no definite standard for the use of materials in relation to time, place, or occasion has been set up. In America women are freest from tradition, conventionality, and class distinction, but for all their opportunities many fail to unite

principles of beauty and appropriateness. A woman may go so far as to wear a velvet gown, picture hat, and party coat to market, or a discarded reception dress to go shopping. Such an exhibition of misplaced elegance is a manifestation of ignorance of beauty and appropriateness.

Another form of inappropriate dressing arises from imitation, which is found everywhere and in all classes of society. Growing out of a desire to appear to be what one knows only too well that she is not, imitation is lacking in both sincerity and truth. Women are guilty of it when they sacrifice quality of material to the style seen in cheap and inferior suits, cheap jewelry, and other cheap wearing apparel. A woman manifests a degree of native coarseness when she wears a cheap reproduction of beautiful animal forms, as for example, a wreath of birds on her hat, tiger skin furs with dangling heads, and an alligator purse with realistic claws. An honest, frank use of plain, inexpensive material worth the price paid for it reflects more credit on the wearer and the community in which she lives than all the showy finery and shoddy jewelry that she can wear. An offensive form of imitation is the

attempt of the home-dressmaker to copy with inferior line, color, and materials an elaborate gown designed by an expert dressmaker. Lack of appreciation of the way lines are formed, lack of skill in draping and manipulating materials, lack of knowledge of laws of design and color to which the expert is obedient, all are factors in the failure of the unskilled workman to copy the production of one who has made a life study of design in dress. It is impossible for all to produce work of equal merit, but we can at least bring to our task some measure of understanding and appreciation which will be the outgrowth of sincerity. Work never rises above the ideal of the worker. A high ideal makes imperative the rejection of every kind of inappropriate dressing as well as the legitimate search for and use of materials suited to the occasion and in keeping with one's position in life.

Psychologists tell us that there are two periods in the lives of girls when their interest in dress is greatest—from eight to ten and from fourteen to seventeen. At these periods most girls form their standards of dress. It is essential, then, that they be given proper direction and that there be instilled

in their minds the fundamental facts of appropriate dressing, namely, that, in order to dress well it is necessary to dress inconspicuously; that it is necessary to have ideals higher than the mere dictates of evanescent fashions; and that beauty is based on principle, is governed by principle, and is the result of principle. Girls so taught will easily see that it is possible to express beauty and good taste whether the pocket-book be very full or nearly empty. Girls should learn that simplicity is not plainness, stupidity, nor poverty, but the very foundation of beauty and refinement. It is not money but mind which produces good taste. Intelligent selection and discriminating choice are the expressions of qualities of the mind. Without these qualities no amount of money will make a dress beautiful. A girl should create for herself a standard which is distinctive and characteristic. When she has done this, the girl of fine taste will avoid all ludicrous expression because her choice is based upon her silent obedience to art principles.

ACCESSORIES

No matter how well a dress is chosen and designed, unless the accessories are in keeping with it, it will not be complete and harmonious.

Girls need to know that the style of dressing the hair out of relation to the size and shape of the head is another example of the bad taste of the wearer. Not only the bad lines and proportions, but the use of colored hair ribbons that do not harmonize with the color of the hair shows ignorance of the basic principles of art. The types of faces and heads are as varied as those of the human figure. Each type of face—the oval, the round, the oblong, the hatchet, and the square—has its own peculiar characteristics. Two features, the nose and the chin, give prominence or flatness to the silhouette of the head. The nose may be pug, pointed, flat, broad and round, small, hooked, or Roman, while the chin may be protruding, retiring, square, oval, pointed, or broad. The pointed nose and angular face will appear more angular if the hair is dressed in pronounced angles, instead of being arranged loosely and yet close to the head. The round, plump face requires that the hair be built

high, and not low and broad along the neck. The girl with the long, thin face should not arrange her hair high on her head nor low with drooping lines, for both arrangements tend to make the long face look longer. The manner of dressing the hair so as to cover important features of the face, as well as the use of "headache" bands of ribbon, tends to caricature ugly features. In every case the hair should be dressed to throw into the background any pronounced feature or defect, and at the same time to supplement or heighten those traits which make for beauty. The principle of the use of the horizontal and vertical lines should be applied to the dressing of the hair as well as to the costume itself. The choice and use of colored hair-ribbons should in no way detract from the color, texture, and lustre of the hair, nor should the quantity of the ribbon be out of proportion to the size of the head. No girl should adopt a prevailing style in hair dressing unless it conforms to the type and character of her head.

Fashion at one instant may obscure one part of the body and at another time emphasize it. In the ballroom bare neck and arms may be displayed

without attracting attention, but upon the street this fashion becomes offensive because obedience to it makes such an exhibition inappropriate whether one is fortunate enough to be beautifully formed or is the unhappy possessor of bones and unpleasing angles.

A better and more appropriate selection of shoes and their use needs to be considered. The wearing of white or light shoes with dark suits in any kind of weather is a display of ignorance. Light shoes are intended for light dresses and for dress occasions. When combined with dark suits they call attention to that part of the figure that should be kept quiet and unobtrusive. Silk hose and dancing pumps on the street on stormy, snowy days are a violation of the laws of common sense as well as good taste. Shoes too small for one's feet give the appearance of shoes having been stuffed, as is also the case with gloves that are too tight. French heels worn by one required to stand long periods of time are evidence of failure to understand fitness to purpose. Girls who are fitting themselves for commercial occupations need to know that comfort and health will increase their efficiency, and that the shoe

that is broad and flat enough to give comfort and ease should be used for business and the street, and the dressier shoe be reserved for home and social occasions.

An accessory that might properly be omitted by the young high school girl is powder. Powder is intended for people who have lost their youth and freshness. As one grows older the planes of the face become complicated. Powder simplifies them. The planes and blemishes become less apparent and the main features are emphasized by the use of powder. A young girl glowing in color and freshness has no need of anything to enhance the charm she already possesses.

In art the caricaturist emphasizes through ridicule certain facts which drive home a truth where language fails. So in the classroom, the making of decorative drawings or posters of various phases of inappropriate dressing, treated in a manner similar to that of the initial figures of the chapters of this book, helps to awaken the younger student and sometimes the one of riper years to the realization that our clothes often make caricatures of us. When students realize that principle is the underlying ele-

ment of good taste they will find through observation no end of topics which illustrate the many phases of inappropriate dressing.

CHAPTER XI

DESIGN IN DRESS FABRICS



In the days of the guilds the mass of craftsmen made no effort to gain any definite style. Their sole aim was to produce something beautiful. Being the essential motive power, beauty became the commonest and most useful thing in their daily lives. Since those days, there

has been no improvement in the main processes; what improvement has come has been merely in the direction of reduction in cost, not in that of design or texture.

In textiles and fabrics, the kind of material, its texture, and the process of its weave govern the character of the design. The process of the weaving sets up its own capacities and limitations, which the designer has to consider. A good designer

knows how to turn into capital not only these capacities but the limitations as well. He achieves through limitation a breadth and richness in design and a judicious alternation of light and dark even in one tone contrasts, and depends upon the sheen of the silk to relieve any flatness of pattern. If the pattern be rigorously drawn, the real beauty of the line and the play of light and dark in the sheen give all the variety necessary. If he is designing velvet brocade, the designer depends upon the sumptuousness of the pile to supplement the exquisite simplicity of his pattern. In the hands of a true designer, the limitation as well as the capacity of weave increases his own inventive and creative power.

The same fundamental principles which underlie other phases of art will be found here—the dominant with the subordinate, repetition, and symmetry. In the dominant with the subordinate, power is felt through the organization and concentration of the subordinate forms to enrich the dominant. To arrange subordinate forms which are attached or related to produce a single dominant form gives character and a structural element

to the whole. Most designers use forms remotely suggesting flowers or simplified nature forms arranged in balance to express length and breadth, but never depth. Leaves, stems and vines may be twisted or bent into lines conforming to ideas of growth. If floral forms are used there must always be consistency in the character of growth. The worst designs are those which are attempts to imitate or portray nature in form or color. When designs lack inventive power, they imitate nature with disastrous results.

Another element to be considered in the principle of dominant with subordinate is the contrast of light and dark in forms. Some designers who know the technique of weaving use a judicious alternation of light on dark background or dark on light to give contrast values. One or the other must dominate, but if one overbalances the other it fails in the same degree as do equal divisions of light and dark. One method employed breaks up the broad mass with an introduction of smaller detail, involving an intermingling of the light and dark. This does away with any possible appearance of baldness or emptiness, and adds to the interest.

The great element of design in textiles is repetition in a new form which repeats the unit at regular intervals over a surface. The unit itself may be rhythmical and symmetrical in form, or may be repeated rhythmically and symmetrically, or both. The method and manner of repeating a unit varies but slightly. To insure regular repetition a geometric construction basis has been accepted which places the unit at stated intervals over the surface in a systematic, organic arrangement. In an interrelation of lines the original basis may or may not appear. This method of repeat becomes necessarily mechanical, but it is infinitely more desirable than the disorderly, inorganic, disjointed arrangement recently found in new fabrics. No amount of fine color will compensate for the absence of either organization or coherent and consistent construction.

Repetition in surface patterns is inevitable from both the economic and the artistic side, for neither machine nor man can go on forever producing new designs. The recurrence of a unit at intervals adds enrichment. The oftener a form is repeated, the greater the need for simplicity and for the removal of all imitation of nature. The charm of the

simplest flower is lost when seen in endless repetition.

Luster and color in silks often lead one to forget form, for the artist has reveled in color at the expense of the design; but if we translate the pattern into light and dark values to discover the design, the design and charm both disappear. Color and texture often hide bad design. In order to disguise the shabbiness of texture some designers use confused, over-crowded patterns which fill every particle of space. Highly elaborate, self-assertive patterns will bear repetition in neither production nor use. The real object of a good design is attained when it grows more beautiful the more one contemplates it. With no attempt to produce designs, understanding and appreciation may be gained from a study of various examples of fabrics, old and new.

CHAPTER XII

DESIGN IN DRESS



The practical use of materials and the construction of a dress can in no way be separated from the design. The principles of design never change, but once learned they become the primary factor in all phases of art. It is only the new form of expressing a principle that is disturbing. The one who has an understanding of the principles of design has a working basis upon which all dresses may be designed unhindered by ever-shifting styles.

The beauty of design in dress depends first upon the structural lines. The placing of these lines in a dress is as important as the placing of framework in a house, requiring that each line be thoughtfully adjusted to make it perform its function in the

harmony of the whole. Certain essential forms remain, regardless of the style in vogue at any given moment. A sleeve is a sleeve, a waist, a waist, and a skirt remains a skirt though the structural lines controlling their shape vary in position, proportion, and direction. In addition to these essential structural lines we have the lines of accessories, such as draperies, flounces, panniers, trimmings, etc., which determine the character, design, and style of the garment, and usually influence and change the silhouette of the figure. The direction of these lines is what gives order, grace, and symmetry, or disorder, confusion, and instability. There are hidden force, vivacity, and life in the lines of a dress that come with a long, upward sweep, while there is disorganized weakness in lines that droop or sprawl awkwardly, displaying disjointed movement, or that divide the figure into sections. When the drapery falls in long folds few in number and pure in curve, each movement of the body creates in the material a new set of graceful folds which follow the contour of the body, as in the initial figure, page 31. The true strength of design will be found when the structural lines express vitality, force, and

directness, and present a unity and simplicity which make for enduring satisfaction.

If drapery is drawn upward instead of being allowed to fall, the points of support, the number of folds, the method of arrangement, and the texture of the fabric all influence the character of the lines. Lines formed by a zigzag arrangement more or less angular, caused by the weight of V-shaped festoons or transverse creases or folds descending and diverging to make room for others, give confusion, unrest, and awkward movement, and disturb and even distort the silhouette of the figure, as in the initial figures, pages 45 and 53. The eye habitually connects similar things and follows the course of a line. The flow of light over a surface or down a fold aids the eye in passing from one to another. The eye is compelled to make an unpleasant adjustment when it has to pass across instead of down lines and is further troubled when many cross lights are caught upon transverse folds and broken curves which have no rhythmical connection with each other. If lines are crossed and multiplied, the design becomes confused and difficult to follow. Rhythm in line which comes through regularly recurrent ac-

cents either through folds—as in 2, 3, Plate A—or trimmings, or points of support—as in initial figure, page 82—is important. When these accents are irrelevant, the proper relation and interdependence of parts is lost. Long graceful lines and complete curves will produce unity and simplicity from complexity, and the directness and vigor of structural lines organically arranged will bring order out of confusion. Power is secured through the leadership of main or dominant lines which are clear, coherent, and readily seen.

By the different adjustment of lines, forms and areas are gained which produce proportion. Good proportion means a balance in good spacing which gives a sense of equilibrium without equal divisions. A one-line division in a dress expresses meagreness. Equal divisions in a dress produce monotony, as in 1, Plate XI. Redundance of division subordinates the person to the dress, as is seen in a superfluity of flounces or in tiers of trimmings. Good proportion is a comparative relation of parts to the whole, which when secured produces harmony and beauty. The sense of proportion is not wholly a natural gift, but neither is it wholly the result of knowl-

PLATE XI

1. Equal divisions.
2. Balance of unequal spaces.
3. No rhythmical relation of spots.
4. Conflicting elements and self-assertive spots.
5. Related accents showing unity.
6. Unity and coherence.
7. Strong lines having vitality.
8. Weak structural lines.



PLATE XI

edge of drawing or of experience in designing. It is a combination of all. It is an acquired power which results from a persistent effort to choose properly balanced spaces and to exercise accurate critical powers, so that one becomes delicately sensitive to finer forms, shapes, and proportions.

The dominant lines of a dress mark certain necessary big spaces. Within these big spaces, the details must be disposed of through the use of light and dark or of tone in the materials employed, to give the dominant and subordinate masses. Color adds charm and enrichment. The dominant mass is more frequently placed at the center front, sometimes involving waist and skirt, as in the second figure, Plate XII; or it may come in the horizontal divisions, as in the first figure, Plate XII. If the big space is left untouched and remains dominant, certain other spaces become component parts of the design, as in the sleeves of the third figure, Plate XII, and in the initial figure, page 80. Occasionally a successful design has been found where the dominant mass came in transverse bands or festooned flounces at the bottom of a dress. However, the normal position for it is in the waist.

Power and beauty will be expressed through the organization and concentration of the subordinate to the dominant mass. The orderly arrangement of subordinate forms which are attached or related to the dominant mass is what gives structural unity and consistency as well as character to the design, as in the central figure, Plate XII. There should be similarity in form, but subordination in size and proportion. The repetition of forms and colors sympathetically arranged gives variety and coherence. Absence of coherent, organized, or consistent relations of spots or masses makes ugly and awkward spaces with no rhythmical connection with the dominant mass, as in 3, Plate XI. There must be reason for each line, tone, and form employed, for their position, proportion, and shape determine their fitness. The whole must be made up of parts so organized and related to each other and to the whole that no one can be removed without affecting the unity of the whole.

Unity is a consistent relation of all forms with a reason for each that keeps the right accent in the proper place. Unity holds the attention to the main mass and does not permit the eye to jump from one

place to another, as in figure 3 and 4, Plate XI, but leads it through all the details of the design in orderly movement. Unity involves rhythm. If a subordinate surface asserts itself either by size, bold pattern, or strong color it becomes the only part of the figure which is seen. If a dress expresses unity there will be no opposition of parts or accents, no elements of conflict or divisions, no inconsistent introduction of self-assertive spots or patches of color, and no lavish or unintelligent use of ornaments, even if the materials introduced are marvels of beauty in themselves. There will be nothing to disturb the harmony. A dress is satisfactory only when all the details of which it is composed disappear in the general harmony of the whole.

When dresses are designed with lines suited to the wearer's individual figure, thus accenting the graceful contours of the body; when they are fashioned in obedience to principles of art and express originality in design; when they utilize colors that enhance and enrich the complexion and add to the harmony of the whole, then women and girls will be contented with what is permanently beautiful, and will cease to follow every fleeting change of fashion.



PLATE XII

Home Planning

2

“Every man’s proper mansion,
house, and home, being the
theatre of his hospitality, &
the seat of his self-fru-
ition, the comfortable part
of his own life, the noblest
of his son’s inheritance, a
kind of private principedom,
may the possession thereof
an epitome of the whole
world, may well deserve
by these attributes accord-
ing to the degree of the
master ❖❖❖❖❖
to be delightfully adorned.”

*from a letter written in 1600
by Sir Henry Wotton. 22*

The letter written by Sir Henry Wotten is from Litchfield's Illustrated History of Furniture, and is reproduced by the courtesy of the owners of the copyright, The Page Company.



PLATE XIII

CHAPTER XIII

THE HOME



The primary cause of the existence of industries, of commerce, of every form of manual and mental labor, is that men and women desire to maintain a home. They subject themselves to all manner of toil, endurance, and sacrifice in order that they may realize

in a degree, at least, the fulfillment of some cherished ideal of a home. Though not the boundary, the home is the vital center of all life's activities. It is the place where the wholesome spiritual, intellectual, and physical growth of all members of the family may be fostered. It is a place where beauty is as vital to true happiness as is convenience, and where the friendly recognition of individual rights is vital to the comfort of the family. Its in-

fluence is the most enduring that can be brought into the life of a being, whether for good or evil. Out of it have come disastrous failures, and out of it men and women have developed strength of character, honor, integrity, and understanding of ideals. The mission of the home is to teach the value of the ideal combined with the practical, and to cultivate the heart.

Home making is a profession, and needs the training necessary for the pursuit of a profession. The homemaker has to deal with artistic merit and with the ingenuity of invention in industrial and commercial products, which include everything from house-building, paint, and glazing to furniture-making, textile-weaving, pottery, and fine arts. A comprehensive knowledge of the industries involved is important to the welfare of the home, since everything used or fashioned is either beautiful or ugly, and has or has not economic and artistic value. No problem in life requires a higher grade of intelligence in management, selection, and arrangement, or a broader sympathy and understanding of every phase of industry and art than that involved in the establishment of a home.

As a consumer, the homemaker must take her responsibility in spending an income no less earnestly and seriously than the man takes his as a producer. She must face the same problem that the man of affairs faces in his business, that of the estimation of cost, qualities, and values, both economic and artistic, and the relation of expenditure to income. The homemaker must awaken to the realization that the energy and steadiness of the father in earning an income must be met with equal wisdom and care in the spending. For it is as important to produce an intelligent consumer as it is to develop a capable producer, and the ethical, artistic, and economic success of a household depends as much upon the care and intelligence in spending the income as it does upon the earning.

Suppose that you were unexpectedly to come into possession of a limited sum of money, perhaps \$5,000.00 or \$4,500.00, or even only \$4,000.00, with which to purchase a lot and build and furnish a house, with the stipulation that the finished product should be beautiful and harmonious in arrangement and free from all debt. What would you do with it? Has home any significance to you other than

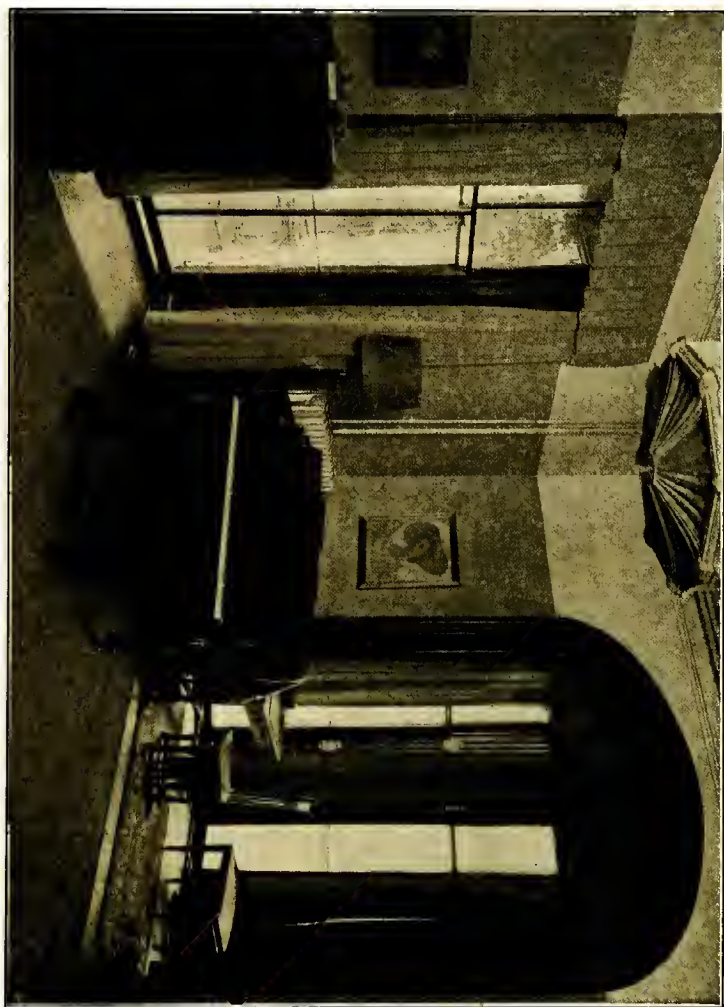


PLATE XIV

its appearance and location? Have you some hidden ambition which you long to embody in definite, practical form? Can you maintain such an investment upon the present income of your family?

The solution of this problem confronts every student of Home Planning. While it is wholly an imaginary one, it may be made so practical as to lie well within the range of ordinary experience, and may be developed in every way in which an actual one is developed. The sum stipulated in the course is limited for two reasons: first, the average wage-earner seldom has more than \$5,000.00 to spend on such an investment; and second, while it requires no particular amount of intelligence to spend money, as the over-abundance and noisy self-assertion of some furnishings testify, to spend a small amount discreetly and discriminately requires a marked degree of knowledge of what constitutes beauty and good construction. To spend money lavishly is not necessarily an indication of good taste, but often betrays a complex state of mind which desires accumulations usually of the commonplace, and rarely of the beautiful. We are told that "the chief use of art is to sharpen our

dulled senses," that is, to bring into practical exercise our discriminating powers in choosing and using what is beautiful and harmonious in form and color.

The problem which confronts the student is how to obtain the greatest amount of beauty and convenience with the least amount of actual expenditure; how to be adequately housed so that artistic simplicity may go hand in hand with economy. Beauty in common and familiar things must be secured, artistic merit must be attained in the arrangement of all furnishings, and a knowledge of principles governing good construction and production of furniture and floor-coverings must be exercised. In short, there must be ability to select with economic and artistic comprehension all things that go into the house, from the humblest articles of utility in the kitchen to the fine arts.

As the shrewd man of affairs makes careful calculations of every detail of a proposed business venture before he enters into it, so the student of this problem must carefully consider all things pertaining to the location, the building, and the furnishing of this house. The vital question which

the investor faces is the maintenance of this investment upon a limited salary. Can a \$4,000.00 investment be maintained upon a \$900.00 salary? Is it possible to maintain a \$4,500.00 investment upon an \$1,100.00 salary? Or a \$5,000.00 investment upon a \$1,200.00 or \$1,500.00 salary? What are the actual living expenses of a family of five for one year upon any one of these stated salaries? This should be worked out, not from statistics, but from the actual living expenses of the student's own family. The main items may be considered under two heads, living expenses and pleasures. Enumerating the living expenses, we find the main items to be food, clothes, fuel, light, water, laundry, taxes, insurance, assessments, medical attention, carfare, church, and charities, besides many other items under the head of miscellany. Under pleasures, the expenditures cover books, amusements, entertainment, hospitality, and travel. The final estimate of the distribution of the cost of living will vary according to the locality of the home, the family tastes, and their methods and manner of living.

Should any one still remain in doubt as to the

amount of human effort or sacrifice required to maintain a home, let him carefully itemize the expenditure for food for a family of five for a year, and also the individual budgets for clothing for each member of this family for one year. Then he will realize how little comparatively is left for books and amusements; what members of the family can travel and how far. There will no longer be any question of the need of giving students knowledge and skill in the successful selection and management of the home, for they are soon to become the homemakers who are to select the food, the clothing, and the common furnishings as well as the fine arts, every phase of each of which should minister to the highest welfare of the home.

CHAPTER XIV

CHOICE OF SITE



The most important thing after the decision to build is the selection of the site. Many times through a combination of circumstances only one locality has been available to the prospective purchaser, and no opportunity has been given to gratify a cherished ideal. The

best results will be attained when the preliminary questions can receive careful and mature consideration.

The purpose or ideal around which this home is to be built determines the type of house and its location. One desires a modest home. Another may choose an income property,—a building to be rented, a double or duplex; or a small shop in

which the owner maintains a residence and at the same time carries on his business. One's love for nature may lead to the choice of a produce farm to raise poultry, truck, small fruits, flowers, mushrooms, or bees. Whatever the decision, the actual setting for the house must be critically investigated.

Desirable and inexpensive sites suitable for the modest residence can be found in the outskirts of a city or near a small park or along some of the water-courses to be found in every city and town. There are to be found in every city irregularly shaped lots of uneven, rolling land which can be secured at a minimum price. This type of site, overlooked or ignored by the real estate man whose sense of beauty has been dulled by the regulation, smoothed-down, artificial lawn, can be made distinctive and beautiful. A specially designed house, recessed to fit the possible irregularity and thus skillfully retaining the natural beauty of the land, relieves the monotony of the regular building-line of the street. The site commanding fine views up or down stream, across valleys or lake, or down city streets must not be overlooked, for a site with a vista is likely to increase in value. Every avail-

able resource should be employed in seeking a desirable location for the permanent dwelling place.

The site which will bring the largest income for the investment determines the selection of the location for the rental property. In every city and town the proximity to the best residence districts will bring the best return upon an investment, but the valuable frontage makes it impossible in this project to purchase a lot facing any of the best residential streets. The cross streets in or near these districts frequently offer sufficient space at the rear end of a lot for the construction of a compact double or duplex house without a yard. Those persons desiring yards or kitchen gardens for their rental property can secure locations in the less fashionable parts of the city. The residence section of the manufacturing district offers an opportunity for good rentals at varying rates of interest on investment, according to the character of improvements. The little shop must be situated in an accessible thoroughfare in an outlying district where large numbers of workers pass its windows daily.

The limited sum to spend makes it impossible to select a central location.

The locality chosen, the prospective owner is brought face to face with the consideration of conditions, either detrimental or beneficial, to be found in the community in which he intends to live. It is necessary to acquaint himself with innumerable facts related to the health, comfort, and happiness of the family. He must investigate the source of water supply, the manner of sewage disposal, and the source and efficiency of the lighting system. He must learn whether street-widening and other improvements and assessments fall upon the purchaser, and also the possibility of future increase or depreciation in the value of the land. The character of the neighbors, both present and prospective, and the accessibility of schools, shops, churches, and social activities must also be considered. The lot must be in close proximity to satisfactory lines of transportation, but not so near that the noise of traffic can disturb the purchaser's rest and relaxation. His home must be amply protected against fire, and must be protected by law against the encroachments of saloons and other detrimental

influences. Such considerations may make slight difference to a transient dweller, but to a possible purchaser they are of the utmost importance.

All this settled to his satisfaction, the prospective owner may be surprised to find that he can not build the kind of structure he wishes. He will find that local building committees have adopted regulations and restrictions controlling the construction of all buildings. It will be necessary to ascertain what legal guarantee the community offers as to the quality, kind, and value of the buildings permitted on this and on adjacent land.

The desire to live in the country may lead to various choices. To those with abundant resources, who care little for society and its affairs, the selection of a location may depend on natural beauty, for example, a bluff near a river or lake, or pines or beech woods. They may give no consideration to other advantages or disadvantages aside from the proximity to the railroad station and the ease with which necessary supplies can be obtained. The one who develops this location has ample opportunity to make it into a picture which will delight the eye all the year around with its har-

monious relation of contours, trees, roads, and vistas.

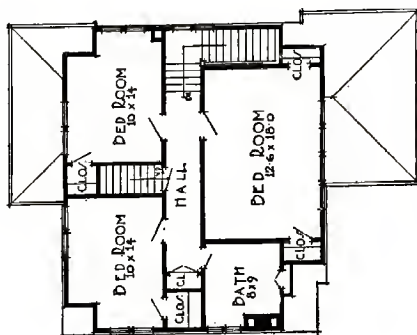
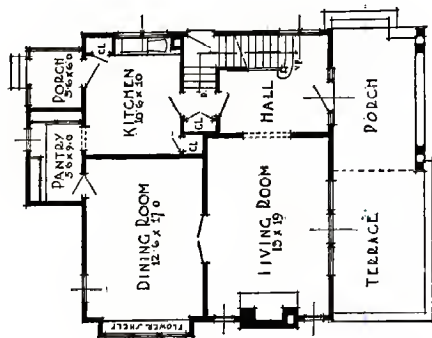
To the one who desires a produce farm, the considerations will be very different. The natural beauty of the setting will receive little attention, for in this case the nature of the soil, the drainage of the land, and its water supply are of primary importance. The influence of soil upon vegetation as well as upon health is apparent, and a prospective purchaser must know whether it be loam or clay, gravel or sand, fertile or sterile. Rich loam is best for vegetation. Loam with a substratum of gravel and sand is usually found in low lands near a river and is excellent for drainage because it is porous and allows the water to disappear quickly. Clay, the commonest soil in the country, holds water and fosters dampness. It is usually found on high land and frequently is water logged, thus making the air damp and cold. It is possible to change the condition of soil by a system of subsoil drainage and sometimes by the removal of trees. The subsoil drainage can be carried out by means of tiles or pipes placed two or three feet below the surface of the ground. It is also possible to

change the condition of the soil by the carting of leaf-loam and the use of various kinds of fertilizers. This is expensive and not always satisfactory unless there is a proper condition of soil to receive it. A rocky subsoil with a top layer of clay will grow a kind of vegetation which is sometimes desirable for poultry, but this the small fruit or truck farmer will not choose. Where water trickles through the rocky strata sufficiently to form ponds there will be a good location for duck or frog farms. "Made" ground should be avoided, for it consists of animal and vegetable refuse which frequently ferments and putrifies.

The expense of building varies a good deal according to the nature of the foundation. If built upon a clay site the foundation needs to be placed deep enough to avoid shrinkage from atmospheric changes and thereby to prevent walls from settling and cracking. A stiff clay makes a good foundation if there is a porous subsoil. There is a possibility of movement of sand or gravel from the action of water which may cause walls to crack unless the foundation of the house is very stable and well placed.

The best site for any house will be on raised ground, which slopes away in all directions, thus giving natural drainage. A generous distribution of trees which will give sufficient shade and sunshine permits free circulation of air. Such trees will also serve as shelter from prevailing winds, for the direction of winds on a bluff, across a plain, or down a street makes a screen of some sort necessary in exposed places. In case of dampness, no trees should be nearer the house than the length of the tallest tree, thus permitting a circulation of air and sunshine. The value of the latter as a disinfectant can scarcely be overestimated.

Water supply as well as drainage and soil should be considered and settled before the site is permanently fixed upon. The little stream that babbles along so peaceably may be an outlet for some polluted body of water higher up stream. It may also develop surprising results after a heavy rainfall. Drinking water from shallow wells, springs, or streams is likely to become contaminated or to fail in times of drought. Where it is possible one should take advantage of public mains. Driven or artesian wells are often the only available source



of supply. A private water plant, which can be installed for a reasonable sum, furnishes a sufficient storage supply and also a high enough pressure for fire protection. This plant is a kind of compressed air and water pump, run by a gasoline engine with an underground, an on-ground, or an overhead tank capable of containing several thousand gallons of water. This makes it possible to equip the house with running water for kitchen and bath, to supply drinking water for stock, and to irrigate gardens.

The desire for an ideal location quickens the imagination, deepens thoughtfulness about expenditures, and awakens a consciousness of personal responsibility in the matter of good citizenship.

CHAPTER XV

THE APPEARANCE OF THE HOUSE



The actual plans and elevations of the house are so intimately connected that they can scarcely be treated independently. If beauty and economy are to be found in the home, the exterior must be a direct and straightforward outcome of internal re-

quirements. The qualities which make for economy will add to artistic appearance. Simplicity, good structural lines, the pitch of the roof, and the grouping of windows and doors which produces good proportions,—these are the qualities which create beauty without adding to the expenditure. It is a mistaken idea that crude and ugly dwellings are necessarily less expensive than those of artistic merit. The charm of domestic architecture owes

nothing to richness of materials or abundance of applied ornamentation, but comes through the thoughtful use of good proportions to secure graceful balance and pleasing grouping and to eliminate extraneous ornamentation.

The character and purpose of the chosen house require that it be beautiful and artistic and at the same time substantial and modest, and that it be the expression of good taste and hospitality. It must have such comforts and conveniences as will meet the needs of each member of the family for which it is built. The welfare of the family is not to be sacrificed for the pleasure of a chance guest, however welcome. Strict economy necessitates a square, compact house, for every break or departure from the square or rectangular house means additional expense. A square-shaped house makes possible a simple roof, which is not only less expensive but more beautiful and dignified than one of many hips and gables.

The beauty of the facade depends upon the proportions of the width and height of walls to the amount of roof which is visible. A common failing in many houses is that they appear like

boxes, the breadth being less than the height or repeating the height of the facade. The breadth should be considerably greater than the height, and the windows should be so grouped and distributed within the space as to leave empty wall spaces. The first story should be higher than the second. This naturally will make necessary shorter windows on the second floor than on the first. The systematic grouping of windows in balance with the empty wall space gives order and symmetry. When wings or projections are necessary they should be at right angles to the house and should be small in proportion to the actual width of the elevation to which they belong. Otherwise the building will not appear as a unit. The main structural lines, forming one complete unit, must be clearly defined and must serve as an outline of the house as a whole.

Architects have always depended upon the use of the horizontal with the vertical line to break spaces, and upon a certain distribution of shadow, which emphasizes form and structural lines, thus relieving the monotony of a flat surface. This is especially true in Greek temples, French cathedrals, and many other noted buildings. In our modern

dwelling the recessed places, ells, porches, pilasters, and hooded doorways cast shadows which emphasize structural forms and add greatly to the appearance of the building. The principle of the vertical line emphasizing height and the horizontal increasing the apparent width is unfailing in architecture as in dress. This is readily seen when vertical columns are used in a circular porch and extended to the top of the second story, thus emphasizing the height of the house and dwarfing the entrance and windows. The height of the column is still more exaggerated and sometimes distorted when such a house is placed upon the top of a hill with the only avenue of approach from below. This house with its pronounced vertical lines requires spacious level ground with a repetition of vertical lines in tree trunks. Vertical lines can be used upon a hill or bluff only when they are subordinated to pronounced horizontal lines. A long, horizontal line expresses stability and conforms better to the character of a bluff or to the flatness of a plain.

A dwelling exposed on all sides must be interesting and presentable from every point of view,

having no "back." Simplicity and the effect of strength are essential. It is not enough for a wall to *be* strong; it must *look* strong. In other words, it must be well-outlined in long unbroken lines extending to well-proportioned eaves. If the main outlines and proportions of the house are bad, no amount of ornament will hide the ugliness of the design. There should be an entire absence of applied ornaments, by which is meant features which are introduced only for effect, with no structural significance. If decoration is used, though it may be safely omitted, it must rise directly out of the structural lines of the house. The sacrificing of permanent principle to temporary fashion will in a short time cause depreciation in value. Many modern houses are soon left vacant because they are built after a caprice of fashion and not from principle.

The next important feature after the general proportions of the body in relation to the roof, is the entrance, which must express hospitality. No matter how plain or how small the house, the doorway must receive considerable attention. It has the first claim to adornment and gives the key-

note to the whole design. It may be plain, but it must be prominent, well-proportioned, and dignified, and must be in harmony with the rest of the house. The use of steps as a means of approach to a doorway adds dignity and prominence. Without steps it would be difficult to make an entrance express all that is expected of it. Sometimes a porch serves as a direct passageway to the entrance, as in 2, Plate XIII. The approach to the first house, Plate XIII, is placed at the end of the porch so that the covered space in front of the entrance door can be used for chairs, table, and swing, instead of being used as a passageway. The other end of the porch is an open terrace which admits ample light into the living-room. Some entrance doors are treated like a range of windows, the only difference to be seen being that the central one is continued to the floor. The danger in choosing this type of entrance lies in the superabundance of glass, for a door should express privacy and protection. A cottage with a smaller door may be given a charm of its own by placing above it a simple hood which serves as a protection from sunshine or rain. The design of some entrances

includes the door, the porch, and the windows above, which together form one complete unit and are the dominant feature of the exterior of the entire house. When the windows directly above the entrance are not planned to be in harmony with the entrance, they become the discordant factor of the exterior. The doorway must be kept in keeping with the style of the house. A colonial doorway is not suited to the craftsman's house or *vice versa*. There must be fitness in the style of the door and its relation to the house. A study of doorways of early colonial houses with their slender graceful columns or fluted pilasters, pointed or curved pediments, broad, well-proportioned mouldings, and well-spaced panels helps one to appreciate beauty and purity of line and finer proportion.

Windows require attention to the demands of the interior as well as to the appearance of the exterior. While the chief requirement is sufficient light and air, it is as easy to over-light as to under-light a room. The grouping of windows aids in the concentration and distribution of light and prevents cross-lights, which are detrimental to people as well as to pictures and furnishings. By the

massing of windows, larger areas of wall-space are gained, thus adding to the appearance of both interior and exterior. Casement windows are well adapted to grouping and concentrating, and in some houses are more desirable than single double-sashed windows. The double-sash windows, when used in regular grouping, should be tall and narrow to be well-proportioned. When used singly, they break the wall into too many small spaces. French windows and doors are useful, for they make an easy approach and command good views. On the other hand, they admit draughts and quantities of light to that part of the room that should be kept warm and quiet, the floor. A good plan in the arrangement of windows in any house is to reserve one space for the principle group of windows, usually those of the living room, and to keep all others in the house subordinated.

There should be evenness in the height of windows on each floor, though they may vary in length along the lower line. Where it is possible, a relatively uniform size of windows should be kept throughout the building. The harmony and symmetry are lost when windows of various sizes and

irregular shapes are used. If the wall space between windows seems barren and empty, it can be relieved by the use of shutters. It is true, these add to the cost, but they often add to the convenience, shelter, and comfort of the inhabitants. The hanging of casement windows is important. Three things are essential: ventilation of the room, resistance to the elements, and hanging of blinds. The double-sash window is in two parts, sliding up and down by means of pulleys and weights, and requiring heavy mullions. For convenience in use, simplicity in construction, and artistic arrangement, casement windows are most desirable, when side-hung and opening out. They require no weights to balance, and thus make possible the use of very slender mullions which add to the artistic effect if the windows are arranged in groups. When they open outward they act as a screen to catch and deflect a breeze. The entire window is available for ventilation, if desired, doubling the amount the double-sash window furnishes.

It is generally admitted that window panes of medium size are more satisfactory than many small panes or one large one. The chief objection to many

panes is the divisional bars, which interfere with the view, diminish the light, and make difficult the work of cleansing. Very large panes of glass look heavy and uninteresting, and give a feeling of lack of protection.

The proportion of the roof that is seen is determined by the pitch and must be considered in relation to the width and height of the walls. The long slope of the roof of some bungalows overbalances the facade of the house. Too small a proportion of roof to the facade is rarely seen. Simple, unbroken roofs of good proportion are more beautiful than roofs broken by windows or dormers, many elaborate gables, and expensive hips and valleys. These latter entail increased labor and material, and constantly need repairs, since it is difficult to build them waterproof. Nothing should be permitted to complicate the construction of the roof. The appearance of the roof depends somewhat upon the ridge, and for this reason, effort should be made to secure a good sky line, which excludes all sharp angles, abrupt changes in direction, and ornamentation. Wide eaves well-proportioned give shadows and are desirable for protection from sunshine and rain.

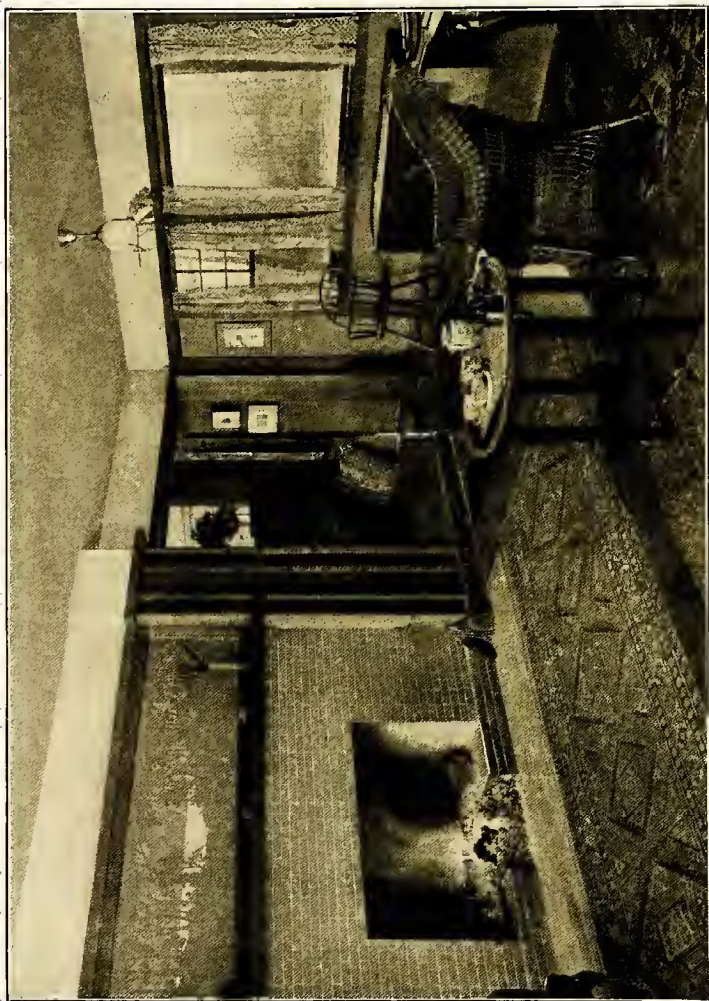


PLATE XVI

A bold, solid chimney stack well placed adds to the appearance of the skyline, and makes a marked difference in the appearance of the house. From a distance the silhouette of the roof and the chimney is practically all that is seen. In so small a house as is here considered, there can be but one chimney, which must be placed near the center of the house. However, it may have several flues to do service not only for the furnace and kitchen, but for the open fire-place, if there be one. Economically, one central stack is best for heating purposes, for cost of construction and building materials, and for artistic effect.

The question of kind of material to be used is easily disposed of, since the construction of concrete or brick is out of the reach of anyone with so limited a sum of money to spend as that specified. In some localities, frame construction or part timber and plaster is least expensive and is therefore chosen. One material should predominate. The effect of elevation where many different materials are employed is unrestful and inartistic. The use of timber or plaster for the walls, and another material for the roof gives sufficient variety. When

a veneer of red brick below, timber and a patch of plaster above, concrete porch with wooden columns, and shingles are used in same building, the unity of the whole is lost. In the first house, Plate XIII, the exterior should be rough in texture. It may be constructed of wide siding with the rough side out or of shingles, and may be stained either warm brown or silver grey. The exterior of the second house, Plate XIII, can be of either stucco or siding painted white, with green shutters and roof.

In working out his individual problem, the student begins by determining the character and style of his house. He should choose the design and material suited to the locality, but it should in no way conform to the ugliness which may prevail there. Following such suggestions as are to be found in the best books, magazines, and good photographs, a student may make perspective drawings or elevations of his house in its actual setting, in whatever medium is best suited to his purpose, that is, in lead pencil, pen and ink, colored crayons, or water-colors. In these drawings every law of balance and good spacing essential to structural beauty must be emphasized.

CHAPTER XVI

COMPACT ARRANGEMENT: A SURVEY



The fascinating problem of making floor plans calls for foresight and thorough understanding of the requirements of the every day life of the family which is to live in the house. The convenience of a house in which the mistress and maid are one depends

upon compact arrangement, which is essential for heating purposes and for economy in construction, and at the same time upon the avoidance of an awkward or cramped arrangement of rooms. The judicious placing of partitions and stairways, the concentrating of flues, the doing away with all needless passages, the skillful and economic arrangement of rooms, and the securing of thoroughfares for convenience and comfort, all require the deep-

est thought and consideration. Every foot of space must be assigned to a use which can not be so well served by any other apportionment.

Some published plans make no provision for anything but the construction of the house, thus leaving the house only a skeleton when completed. With keen disappointment the owner is compelled to supply furnace, electric wiring, fixtures and bells, gas piping, plumbing and drain pipes, equipment for the bath and kitchen, screens, cistern, sidewalks, fences, and grading of the yard. In order that no essential equipment may be overlooked, the necessary requirements of each room should be itemized before the floor plans are begun.

An ideal plan for even so small and so simple a house is a complex one, for the scheme of the house as a whole must be kept in mind. A square, compact house or one rectangular, nearly square, having five or six rooms is most desirable from the viewpoint of economy, convenience, and heating. The house must be so placed on the lot as to secure privacy, to command views, and to admit light and air into the largest number of rooms. Settings that are picturesque require a plan that utilizes to the

best advantage the natural beauty of the ground. In order that the living-room may command the best view, the kitchen may be faced toward the street. There must be no "backs" to the house, nor should there be a "line up" with the houses of the neighborhood unless there is a distinct advantage to be gained in doing so.

The division of spaces in the floor plan requires a careful adjustment of the proportions to fit the specific purpose of each room, and to conform to its relation to the other rooms. There is economy in choosing stock lengths and sizes in the timbers of a room, which economy need in no way detract from the appearance of the house. Floor joists and rafters are obtainable in 14'-, 16'-, and 18'-lengths, and rooms and roofs should be planned to these dimensions to prevent waste in cutting. The same advantage is gained in choosing stock sizes in doors and windows, without in any way sacrificing artistic merit.

The entrance has its influence upon the aspect of the house. It may repel, invite, or display ostentation. It admits heat, cold, sunshine, and storm alike. For these reasons a small vestibule or pas-

sageway with sufficient space to pass through, though not to tarry in, is desirable, for it serves as a transition from the outside to the inside without waste of floor space.

The living room is the most important room in the house, and should be the most cheerful and inviting. The modern living room abolishes the parlor, the sitting room, and the long dark passageway known as a hall, with its cramped stairway. It is a room in which the family gathers for recreation, for quiet, or for good comradeship. The living room should be well supplied with windows grouped for the concentration and distribution of light in such a way as to keep the lower part of the room in shadow, to prevent the crossing and recrossing of lights, and at the same time to leave plenty of wall-space for pictures and large pieces of furniture. The windows of this room should be the dominant windows of the house and should be so placed as to command vistas and good ventilation. This sometimes makes an enormous difference in the cheerfulness and artistic effect of the house. The living room fireplace should be ample and well-located, near the center of one wall, and

may be flanked on either side by bookcases. If placed in or near a corner, it loses its charm, and appears not to be an organic part of the room. If one chimney with several flues must serve for all purposes, it should be central and should be studied in connection with the kitchen as well as the living room.

The placing of the pantry for convenience between the dining room and kitchen saves steps and prevents the odors of cooking from penetrating into the house. For obvious reasons the dining room should be easily accessible from the living room. It must be large enough to allow easy passage around a large, long table and to accommodate any heavy furniture that may be in the room. The grouping of windows adds cheerfulness to the room. This room may be shut off from the living room by a pair of glass doors.

The kitchen placed in a corner of the house with door and windows at right angles gives cross ventilation, which reduces the heat and carries off the odors of cooking. The kitchen is the work shop and should be convenient and sanitary. The placing of the stove near a window with the sink and drain-

ing board at right angles to it and with shelves within easy reach adds to the ease and comfort of preparing meals. Most kitchens have neither enough light nor cupboard space. There should be two good cupboards with narrow shelves, for deep ones hide needed articles. A small kitchen 10' by 10' is desirable for a family of five, and one of 12' by 12' for a larger family. Plainness, simplicity, convenience, and compactness are to be sought in this room, where most of the heavy work is done.

Doors need to be placed to give convenient access to thoroughfares and to serve as a means of ventilation, and must avoid striking each other, the fireplace, or any piece of furniture. Doors in the pantry should not be directly opposite each other. It is desirable sometimes to hinge a door so as to screen the larger half of the room. The doors in the house should be limited in number and should open clear of the main portion of the room, leaving the larger amount of wall-space unbroken. The large unbroken areas of a room add dignity and give an impression of roominess.

Since stairways are a most important means of

communication, considerable attention should be given to their placing, breadth, and accessibility, if both comfort and beauty are to be assured. The placing of stairs without wasting space or cramping is not always an easy task. They may lead out of a living room in a picturesque and convenient manner, or from the vestibule, or from a corridor between the living room and dining room. They should be neither narrow nor steep. A shallow riser with a tread twice its width keeps the stride nearly equal and natural. A landing adds to the ease of the ascent. It is desirable for the upper end of the stairs to open near the center of the second floor into a small corridor connecting all the rooms with the bath. This reduces the amount of waste space which is sometimes found in an upstairs corridor when the stairs open at one end of the building.

The partitions of the second floor should be directly above those of the first floor wherever it is possible to place them there. A bedroom need not be large, but should be sufficiently so to contain necessary furniture. It should be well-ventilated with a concentration of windows for

sunshine and air, and should have sufficient wall-space lengths for the furniture necessary for the convenience of the occupant. The bed is the dominant factor and may be shown in the plan, with wall-space parallel to its width and length. The placing of the chimney near the center of the house throws the flues in the corners of upstairs rooms, thus making it possible to provide ample closets along the inside walls, equal in width to the chimney. Where it is possible to do so, a small window should be placed in a closet for ventilation and light.

The bathroom may be small and compact, but large enough for easy movement. The location of the tub, stool, and washstand, with a shallow cupboard for toilet articles, completes the plan for the bathroom.

In making plans for the first and second floors, as well as for the basement and attic, allowance should be made for the thickness of outside walls, the partitions, the stairways, and the chimney. These should be thoughtfully developed and drawn to scale. Provision should be made for any built-in furniture, such as book shelves, seats, cupboards, or buffets.

The main outline will be found susceptible of infinite variations and modifications suited to different requirements and conditions.

The floor plan, Plate XV, is for the first house,* Plate XIII, and has been simplified in every way to reduce cost. This house has been well built for \$3,500.00. The price includes a good furnace and good plumbing, wiring, electrical fixtures, and screens; a cellar under the entire house and a good floored attic; oak floors, and fumed oak finish for the woodwork of the first floor in the main hall and living room and dining room; and yellow pine and red gum woodwork for the second floor, with floors of finished pine. This plan has some advantages worth noting. The main entrance leads into a hall, and the front door can be reached directly from the kitchen, which is shut off by two doors in a side hall so that odors from cooking cannot enter the main part of the house. This side hall contains a coat closet easy of access from the main hall, and has a stairway to the basement. There is also an outside door so that the laundry or ashes from the basement may be taken directly into the yard.

The entrance from the kitchen to the dining room

*Courtesy of Lee Burns.

is through a serving pantry, which contains cases for china and glassware and a large serving shelf, below which are drawers for silver and table linen. By a slight change in arrangement an ice box can be put in this pantry in such a way that the box may be filled through a door opening from the rear porch. The kitchen has two closets, the smaller of which can be used for brooms, mops, table-leaves, etc., while the larger serves as a pot closet. The dining and living rooms are of good size, with good wall spaces for furniture and pictures. Three bed-rooms on the second floor are of good size, with closet arrangements carefully worked out, the main room having two. A linen closet is placed at the end of the hall, and a small closet in the bath room larger than the usual medicine cabinet is an unusual convenience for such a house. A sleeping porch could be built over the serving pantry and back porch with little additional expense. Care has been used in the placing of doors and windows throughout the house. The floor of the attic is entirely finished, making the house warmer in winter and cooler in summer than it would otherwise be. The attic thus furnishes considerable space for storage,

and has windows at either end for light and ventilation.

Sound construction is essential. The true test of economy will be shown in the absence of repairs. Inferior construction is only temporary. In most localities it is cheaper to build up than to spread over a large area, for the masonry of the foundation and the roofing are the heaviest items of expense. The cost of building materials changes with each season and with different localities, and the price of labor varies considerably, but an approximate cost can be found, and with sufficient accuracy to make it possible for one to keep well within the sum he has to spend. One method of estimating the cost of a house is based on the cubic contents of the house. Figure the height from the basement floor half way through the attic, and count porches at one-fourth of their cubic contents. On this basis the first house, Plate XIII, would contain 27,000 cubic feet, which at 13 cents a foot makes a total cost of \$3,500.00. This is a low price per foot. The average cost per foot over the country will be several cents higher. Another way to secure an approximate estimate is to obtain separate estimates

from two reliable contractors who have made careful calculations of the entire cost of the building and have found the average per room. In central Indiana, a plain, substantial house may be built for an average per room of \$425.00, allowing \$500.00 for each bath and kitchen. This includes everything from the foundation to the finished painted house.

A plan for the garden or door yard should not be neglected. There should be no stereotyped designs, but there should be order and system to produce unity. The controlling factor in the planning should be an effort to make the most of the natural and picturesque features of the land. The most picturesque gardens are never all visible from one point of view, but consist of parts screened by shrubs, bushes, or vine-covered trellises, each part different in character from the other. It is safer to use a curved line than a straight one in paths and lines of shrubbery. Straight lines lead the eye directly to the destination and appear to shorten spaces, while curved lines always suggest distance. In a small garden an effort should be made to secure the effect of spaciousness. The



PLATE XVII

Japanese can teach us much in the way of garden planning. In Japan the working classes have 10' by 12' yards, which they transform into gardens suggestive of vast spaces. There is no point on which the eye fastens, no dominant form to attract or hold attention, and this very absence of anything striking gives a feeling of boundlessness. They use a broad scheme of infinite detail, sometimes embodying a tiny mountain with a tiny lake at its base, and a bridge over a tiny brook, in the waters of which flash tiny gold fish. Stepping stones well-selected and carefully placed lead to another interesting part, while a winding path, partly concealed, leads to dwarfed pines. So the eye is led from one thing to another, resting at no point, and the beholder has a sense of vastness and serenity. In this plan are many valuable lessons. We need not copy their gardens bodily, but we should study them for their admirable following of fixed principles, especially in avoiding straight lines, planting in masses, conserving open spaces, and avoiding points of dominance.

CHAPTER XVII

WOOD-FINISH



Before the real problem of applying principles which govern good taste in the arrangement of a home can be solved, the preparation, color, and finish of the wood must be studied.

No part of the modern, inexpensive home is more abused than the wood-trim, for not infrequently one finds all the natural beauty of the grain lost in an overdose of stain, paint, varnish, or shellac. The wood-finish of any home should be quiet and unobtrusive, and never self-assertive.

The purpose of finish is to produce color and to preserve the wood. Wood may be finished in many ways,—by the use of paint, stains, fillers, wax, and

varnish. A series of experiments will aid in discovering the advantages and disadvantages of the various finishes. Paints, which are formed of certain ingredients that give color, body, and opacity, produce a hard surface which adheres to the wood and protects it, making it impervious to moisture. Some paints have a dull finish, while others give a glossy surface. The wood should be carefully prepared, that is, well-dressed and sandpapered to a satin finish. New woods require two thin coats and a third one for the finish. Unless the woodwork in a house is beautiful in color and grain, it is better not to leave it in its natural state, but to paint it in modified hues, avoiding always pronounced colors or cold greys.

The purpose of stains is to change the natural color of the wood, sometimes slightly and sometimes radically, but always transparently. There are four kinds of stains: oil, water, and spirit, and a fourth produced by chemical change. The advantage of oil stain is that it is easily made and applied, and does not raise the grain of the wood. Colors may be mixed to obtain any hue. There is considerable waste in the use of oil stains. To

produce the right color and retain the texture of the wood, it is necessary to put the stain on and wipe it off at once. When oil stain is put on and allowed to remain, the grain of the wood is lost and the appearance is that of paint rather than of stain.

Water stains penetrate the wood deeply and are transparent and inexpensive, but they are difficult to apply easily and they fade easily and raise the grain of the wood. Water stains are made from powdered forms of analine and vegetable dyes mixed with hot water. An excellent mahogany stain may be made from an old formula of seal brown diamond dye and hot water. In order to prevent any evidence of overlapping it is necessary that the surface to be covered be thoroughly wet with water before any application is made.

Spirit stains are easily applied but are not permanent. They are made by cutting the analine dyes in alcohol and naphtha. The knowledge gained in the study of the theory of color of the effect one color has in counteracting another, may be applied here. For example, yellow pine is never stained transparently with any degree of success, and the natural color of the wood is ugly.

The orange-yellow in the pine may be counteracted by blue in the stain. Many interesting experiments in changing the color and retaining the grain of the wood may be made with spirit stains.

Most woods contain a kind of acid which is characteristic of the natural condition of the wood. When this acid comes in contact with an outside acid, a chemical change takes place. The process of fuming penetrates the entire thickness of the wood, and the color of the wood changes permanently. It is possible to watch the process of fuming wood when various kinds of woods are suspended above a vessel filled with strong ammonia, all in a large, airtight glass vessel. The fumes of the ammonia ascend and penetrate the wood thoroughly. White, red, burr, quarter-sawed, or plain oak change to a deep rich brown. In fumed oak the color is richer and the flecks of wood are lost in the color; in stained oak the flecks resist the color and remain light, while the grain absorbs the color, making an uneven tone. Mahogany, walnut, chestnut, and cherry change by this process to different degrees of a deep, mellow color such as can otherwise be obtained only by old age.

It gives a mellowness of color which no manufactured stain ever produces. Red gum changes slightly, producing a warm medium grey, impossible to produce by the use of stains. Another way to produce chemical change is to use bichlorate of potash dissolved in hot water and applied to the satin surface of the wood, hot acid penetrating deeper than cold. Sulphuric acid applied to the surface of cypress wood eats into the grain in much the same manner as that in which acid eats into metal in etching, thus emphasizing its outline. This finish is suitable only for public places, not for homes.

Fillers smooth the surface of coarse grain. Unless mixed with colors they leave the flecks of light over the surface of grain, which is often offensive. Wax is a preservative and leaves a desirable dull finish. One disadvantage is that it leaves a soft surface to which dust readily adheres and which will eventually wash off. Shellac produces a hard surface and is desirable when well-rubbed down with old sandpaper and powdered pumice stone till it gives a dull, smooth surface. Observation shows that while varnish preserves the



PLATE XVIII

color and grain, it also produces glittering masses of high-lights which call attention to lines, grains, and spots which should be obscured. In recent years experiments have led to the discovery of a dull mat finish in varnish, which can be obtained at most paint shops.

Some woods do not need stains. To stain them is to forfeit the beauty of their natural color and grain. Walnut, red gum, mahogany, and cherry are most beautiful in their natural state, with many coats of dull finish of wax or shellac. Most mahogany furniture and finish is stained, and many woods are substituted for mahogany. Birch, a hard, white, close grained wood, when stained can scarcely be distinguished from mahogany. Furniture made from stained birch is comparatively inexpensive. Red gum is substituted for Circassian walnut owing to the remote and inaccessible districts from which the latter comes. Oak can be stained many colors—golden, weathered, old English, Flemish (black), and malachite green. Very dark wood makes a room dreary and disagreeable unless brilliant scintillating colors are used in decorations. Ash and chestnut are similar to oak in grain and are some-

times substituted for it. Elm and white gum, firm, white, and almost grainless, are substituted for oak by means of a process of a machine-printed imitation of the grain and color of oak. In preparing wood for the home, every effort should be made to obtain a color which is neutral and which preserves any desirable quality that the real wood may possess.

CHAPTER XVIII

FUNDAMENTAL PRINCIPLES I



The interior of the home is the seat of the real problem, the place where the fine, restraining hand of the homemaker must have free play. The artistic arrangement of a home is a problem in design which calls for the practical application of principles of beauty to the most familiar details of domestic life. The furnishing of a room must be neither accidental nor temporary. In spite of changing styles or fancy, there must be a permanent value in the things selected as well as underlying principles of art in arrangement:

Beauty is the result of a more or less conscious obedience to law. Whistler maintained that "the fundamental principles of decorative art as in all

art are based on laws as exact as those known to science, and can be gotten only by laws of balance, proportion, repose, and harmony"; that "art is a science,—*the* science by which the artist picks, chooses, and groups, that beauty may result. The artist can leave no more to chance than can the chemist, the botanist, or the biologist."* With these principles as a basis, it is possible that a home of inexpensive and modest furnishings may be made beautiful and artistic.

The first step in the production of such a home will be an effort to create on paper a harmonious arrangement of each room, so that the whole plan and scheme may be thoroughly thought out before the execution of it is actually begun. Wall-elevations, which are flat surface drawings representing the space from floor to ceiling and from wall to wall without receding lines, may be made to scale. The exact measurements as indicated in the floor plans should be accurately followed in placing doors, windows, and fireplaces. The beauty of a room will depend upon the proportion of its width

*Elizabeth and Joseph Pennell's *Life of James McNeil Whistler*—J. B. Lippencott.

and length to its height, and upon the balance of empty spaces with the openings.

In these elevations the structural use of horizontal and vertical lines in the wood-trim should be considered. Horizontal lines such as are found in base-boards, plate or chair rails, picture mouldings, and beamed ceilings, or in such accessories as borders in wall papers and curtains, emphasize the breadth and decrease the apparent height of a room. Vertical lines such as are found in pilasters, tall, dignified door and window casings, and paneling, or in long straight lines of draperies, emphasize height at the expense of width. The long retreating lines of beamed ceilings, seen in perspective, or the crossing and recrossing of beams in the ceiling call attention to a part of the room which, like the floor, should be kept quiet and unobtrusive, as in Plate XVII. The repetition of horizontal lines in the wainscoting, in the rows of pictures, and in the ceiling in this illustration, decreases not only the apparent breadth but the height of the room as well. No matter how attractive the furnishing may be, when the repetition is thus emphasized the room has the appearance of a box. The

height of a long, low room may be increased by the use of long vertical lines in draperies, by placing the picture moulding at the ceiling, and by the right choice of wall papers in which modest designs run perpendicularly, not diagonally.

Four essential things are to be considered in the arrangement of every room: (1) the center of interest, (2) the arrangement of the furniture, (3) the balance of pictures with empty wall-spaces, and (4) harmonious color. Beginning with the living room, which is the largest, most cheerful, and most inviting room in the house, the first consideration will be to provide for the use of the room and for the many types of furniture necessary for the comfort, occupations, and varying tastes of the different members of the family.

The center of interest must be the dominant idea not of one wall only, but the main idea around which the entire room is arranged. It may be a fireplace with a beautiful picture above it, as in Plate XVI, for the ruddy glow of an open fire gives a sense of cheer and comradeship which nothing else can supply. One cannot enter this room without being attracted by its beauty and simplicity,



PLATE XIX

and by the dignity of proportions and space-relations. If the purse is too shallow for this luxury, the center of interest may be a single picture to be hung with plenty of wall-space about it, as in Plate XX. Care and discrimination will be required in choosing the picture, for it must give character to the room and be the keynote for the color scheme to be used. A prominent and beautiful piece of furniture may be used, as a cabinet, a high-boy, or a piano which is distinctive enough in form and placing to attract and hold the attention when

one enters the room, as in Plates XIV and XXI, and in initial interior, page 160. Book shelves and magazine closets, or a window with a row of shelves beneath may serve as the center of interest. A window which commands a picturesque view may become the center of interest, thus bringing the charm and beauty of the changes of nature into the room. Sometimes the space framed by such a window is broken by a group of tree trunks, or by the bent trunk of some one tree as it cuts across the window space, in the manner of the trunk of a pine tree in a Japanese print. Such a room, beautiful in its proportion and commanding fine vistas, needs little embellishment. In every case, the dominant idea as the center of interest gives the keynote to the entire room, and to this all furnishings are subordinated.

The second essential in the planning of a room is the selection, the balance, and the proper placing of furniture to give a sense of equilibrium without necessarily equal divisions. A proper proportion in the relation of the spaces of a room to its furniture must be secured. If this balance is not secured, no number of costly or rare articles will make the

room beautiful, or will be compensation for the picture that the room might have been. In how many houses do you get from a comprehensive glance a thrill of delight or a sense of beauty? How many houses do you visit which give you the impression that the pictures, rugs, furniture, and hangings were chosen because of a scheme previously thought out? Is each article of furniture chosen because its height, shape, color, or line of construction is in harmony with other objects in the room, and because it performs a function in the harmony as a whole? When a chair is added, its height and character should be chosen with reference to objects near which it will be placed, as in Plates XX and XXI. A table should be selected because its height and line of construction conform to the other objects about it, as in Plate XIX. No matter how beautiful an article of furniture may be in itself, if it is out of proportion and harmony with other objects in the room or foreign to their character, it detracts from the beauty of the whole.

Richness of effect, even in simple, inexpensive furniture, may be gained by the use of a few large objects which balance empty wall spaces. Dignity



PLATE XX

could not have been gained had the chair in Plate XXI been low or broad, or had the top of the cabinet been covered with many ornaments. Many small objects placed on the top of a book-case or on a mantel appear like so many spots which swarm in an unrelated way. The over-crowding of a mantel expresses vulgarity. Three or four well-chosen objects varying in size, character, and color, and carefully arranged, are preferable, as, for example, a rare piece of carving, a piece of lacquer, and some article of utility, such as a vase or candle-

stick having artistic merit. Exquisite small replicas of old masterpieces of Greek or Roman sculpture are inexpensive, and add dignity and character to a room. In the placing of certain ornaments upon the mantel, as in the arrangement of furniture to fill certain spaces, one is confronted with a distinct lesson in design that requires thought in line and color grouping. No object should be placed except in accordance with a well considered plan to secure a balance of unequal spaces. It must not divide the space into equal parts or help to form a group of objects of the same height or contour. A few large ornaments well chosen with reference to size and color are as essential to a well-arranged room as are pictures.

The house in which pictures predominate will need very little other decoration. A picture may be the center of interest of a single wall space or it may be the center around which the entire room is to be built. Many pictures of equal size hung side by side give a repetition in size and form which produces monotony, and each picture, no matter how well chosen, loses something of the value which it would possess if it were more discriminatingly

hung, as Plate XVII. Pictures, like bric-a-brac, are dangerous, for it is easy to overcrowd a wall with them. Another essential consideration in hanging pictures is the lighting. A great deal of the beauty of a picture depends upon the way the light falls upon it. Cross lights, reflected lights, or the absence of lights may mar entirely the beauty of the picture. A beautiful picture should be beautifully shown with plenty of wall-space about it and with adequate lighting.

Pictures should be hung neither too high nor too low, with two vertical wires as invisible supports. The prevalent manner of hanging pictures so that their wires form many inverted V's about a room is offensive. The center of interest of the picture should be on the level of the eye except in the case of a full length portrait. Another good custom in hanging pictures is to hang all pictures in the room so that their lower edges will be on a line, except that of the dominant picture. This one should be dropped a few inches below the line, thus breaking the regularity. Pictures having mats should be hung to themselves. Gold frames and wood frames should be hung separately. There should be no

violent contrasts either in the size or the color of the frames, or in the pictures themselves. There may be variety, but variety alone has no merit unless it results in harmony. After the dominant picture has been placed in its proper light, the order of arrangement of other pictures may be determined according to importance, whether in technique, subject, color, or size and shape, reserving the least important for the quiet, unobtrusive corner. A few fine pictures well chosen and well-lighted are preferable to many trivial ones. They will grow in favor after a person has lived with them for a time, and will bring a dissatisfaction with less artistic productions.

In the living room, the student must express in a concrete way the comfort, the rest, the hospitality of the home. With chairs at angles, with tables and books convenient but never in the way, with the ruddy glow of a fire, with pictures hung neither too high nor too low, this room must not give a sense of either emptiness or over-crowding. It is the place for good comradeship as well as for privacy, a place to rest in, to work in, and to play in, a place which one leaves with the desire to return.

CHAPTER XIX

FUNDAMENTAL PRINCIPLES II



The same principles must be applied to the arrangement of the pictures and furniture in a dining room. In this room the actual necessities are the table and chairs, as in Plate XXII. A sideboard, a buffet, or a serving table add much to

the appearance and comfort of the room. There is greater coherence and unity in dining room furniture than in that of other rooms because there is but one definite purpose in the room. This room also should be light, airy, and cheerful, and should express hospitality. There are large living rooms the corners of which are bays where meals are served, as in Plate XXVIII. Between times there is no

suggestion of a dining room. It is a delightful plan to have a deft maid prepare the table quickly and remove as quickly all traces of it after meals.

The plate-rail should be discarded, since it is no longer an ornament, but resolves itself into a series of spots which attract the eye to that part of the walls that should be unobtrusive. Originally its purpose was to display a few beautiful plates of porcelain or pewter, so rare in shape and color as to require placing beyond the reach of utility. It then became an ornament, a bit of decoration in the room. The selection and placing of porcelain upon the buffet or cupboard shelves is another problem in design which is an unlooked-for test of artistic knowledge of arrangement. It is said that Whistler was as careful in placing his beautiful blue and white Nankin china upon his cupboard shelves or upon his table as he was in placing his signature, the butterfly, upon his canvases. If you remove the signature you lose the perfect balance of the picture.

The problem of the kitchen is by no means the least important. Convenience and sanitation are the first two things to consider, but the question

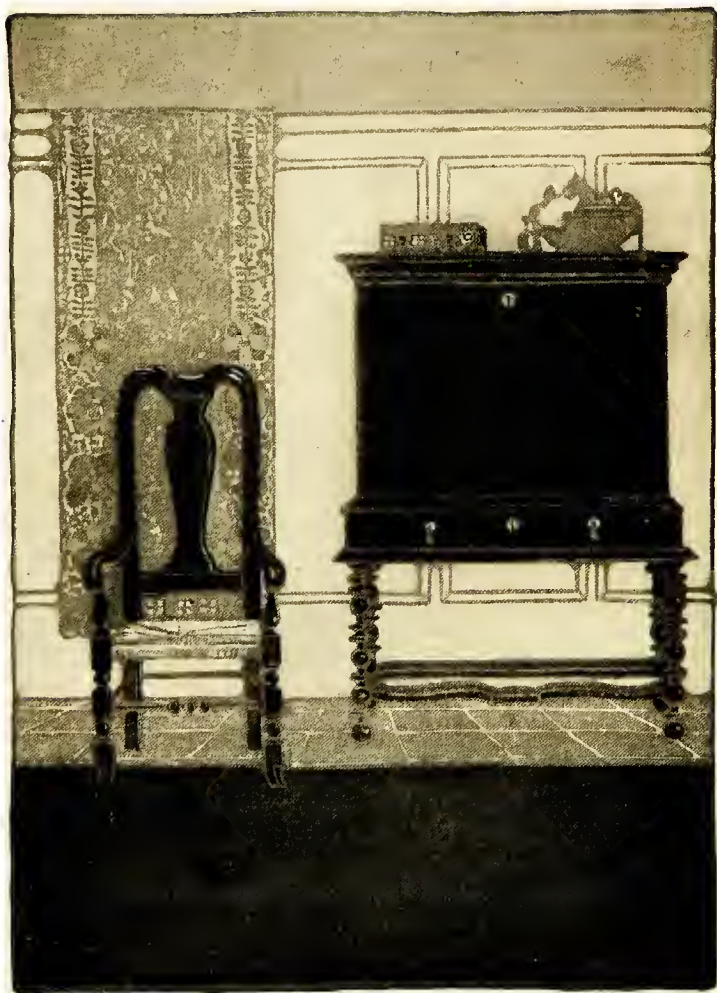


PLATE XXI

arises at once, "May we make it attractive also?" for to many the very word sanitary implies ugliness. The ideal kitchen is not large, and a square room saves steps. Any device in the kitchen which will save steps or time should be considered. One must learn to discriminate between the elaborate, complicated articles and those that are plain, simple, and helpful, for anything bulky in a small kitchen means additional work.

The beauty, convenience, and sanitation of a kitchen depend upon the nature of the treatment of walls, floor, and ceiling, more than in any other room in the house. Tile floors, tile walls, and other non-absorbent floor- and wall coverings are too expensive for such simple homes as are here considered. There is little choice as to the floor, which may be of oak, ash, or some other hard wood. For walls, in recent years several compositions of wood-fibers and plasters have been used successfully, put on in plastic condition and trowelled down to a smooth surface which is almost fireproof and non-absorbent. This furnishes a good surface for paint. Oil cloth is also a good covering. Where the above can not be used, paint is better than wallpaper. Any

neutral color which possesses glow and warmth is good, but cold colors are not. By a judicious use of color in wall coverings, the kitchen may be transformed from a commonplace room into a pleasing one.

Most of the equipment of the kitchen, including sink, ice chest, cabinets, and cupboards, is built into the room. A stove, a chair, a stool, and a table are the only necessary furniture. All kinds of furniture have been invented for kitchens, only to be discarded. Collapsible and convertible tables and chairs which turn into stepladders or clothes-horses are examples of this kind of furniture. After all, plainness and simplicity are desirable. When articles become complicated one loses more time in operation than she saves through the use of these novel devices. An elaborate kitchen table with drawers, shelves, hooks, and sundry other devices may look well and seem theoretically very helpful, but a plain simple table with a few drawers will prove most advantageous. Reform is needed in kitchen stoves, and an effort is being made to improve them. Various types of stoves need to be considered, and the one chosen should lift the ovens

•

well up from the floor. Where one can afford the additional expense, a generous hood should be placed over the range to ventilate and to carry smoke and odors of cooking from the room.

In making wall-elevations, the student should be careful to place the stove in the center of one wall near a window, and the sink at right angles or opposite with shelves and table between to minimize labor, as in Plate XXIII. While kitchens are utility rooms, there is no reason why they should not be made attractive with oil cloth walls, built-in cupboards, and ells with breakfast tables, as in Plate XXIV. The placing of shining copper and of blue and white enamel cooking utensils upon the cupboard shelves follows the same principles of arrangement as govern that of other rooms in the house. The student who chose white and orange bowls and blue and white granite ware instead of grey, and painted her cistern pump blue to be in harmony with the cypress wood finish and buff walls, had a true appreciation of beauty. Beauty depends upon the harmonious relation of parts to the whole, whether that relates to fine arts or to the selection and arrangement of kitchen utensils. It is



PLATE XXII

not the difference in cost but in appreciation which brings harmony.

The bedroom is the place where liberality of mind and character are displayed. It is the place where directly personal things may be kept, such as photographs, crayon portraits, keepsakes, and all those things which relate directly to the sentiment of the occupant and which have little interest to the casual guest. No person of fine taste will have articles that are conspicuous and crude in this, the most intimate of all rooms in the house.

This room is to serve as a sleeping place, and therefore needs large windows for ventilation, and should be lighted and cheerful. The wall-spaces should be adequate for bed and dresser and any other piece of furniture necessary for the use, comfort, and convenience of the occupant of the room. Well-proportioned, simply-constructed closets and cupboards may be built into the room to provide space for hats, shoes, and garments of varying length and character, as in Plates XXV and XXVI. A limited sum of money sometimes stimulates one to exercise no small amount of ingenuity, invention, and artistic activity in designing some well-planned,

built-in cupboards, closets, and furniture. Every detail should be considered from two points of view, those of use and arrangement. The requirements of a bedroom are few, and simplicity will add dignity to the room.

As the designs of wall-elevations of the different rooms progress, the student who has a working knowledge of laws of balance and proportion will express it in a straightforward, orderly way. He will remember that rooms must ever serve as backgrounds or settings for the drama of life. When he permits the articles of furniture to dominate the room and its occupant, he violates every law of good taste. He must have rooms which once arranged will give a thrill of joy and a sense of satisfaction; rooms which are fit to be homes in the fullest sense of the word.

CHAPTER XX

CHOICE OF FURNITURE



The designing of good furniture depends upon two closely related requirements, the practical and the aesthetic. The first deals with comfort, utility, construction, and materials; the latter, with good proportions, balance of related spaces, unity of the whole, enrichment, color, and finish. The good designer is

as much concerned with the one as with the other, and makes no effort to consider them separately. He recognizes that all ornament is the outgrowth of construction and secondary to it; that there is no place in good furniture for applied ornament.

The laws of good construction demand convenience, strength, and security. For example, a chair must be comfortable enough to sit in, strong enough to hold its occupant, and light and convenient

enough to be moved about. A chair may be structurally adequate for the service it is to perform and still be wholly ugly and uninteresting in proportion and line. The laws of beauty demand that the structural elements be used in obedience to the principles of good spacing, balance, and enrichment, for beautiful proportions contribute to a distinctive and lasting quality in furniture. Solidly constructed of firm, fine-grained wood, the chair should combine simplicity in line and construction, balance and restraint in ornament, and artistic grace and comfort; but beauty can never be gained when utility is ignored. These inseparable elements require a well-related adjustment of one proportion or part to another and to the whole.

When construction is sacrificed to ornament, furniture becomes unsuited to its purpose. Machine-stamped decorations and carvings are indicative of display, frequently at the cost of construction and workmanship. Beautiful carving, which can be done only by a master, is the continuation in detail of the thought expressed in construction, an enrichment of refined construction which is an outgrowth of the design as a whole. Applied ornaments, as

well as over-ornamentation and high polish, are generally used to hide blemishes in wood. Straight lines and simple curves may appear plain and uninteresting, but they are never as likely to be so objectionable either structurally or aesthetically as over-ornamentation or as the restless unending spirals and concave curves of debased rococo.

One's own personal taste is exhibited in the selection of furniture more than in that of other features in home furnishing. In our own houses, the houses of our friends, and the houses that line our street, thoughtful examination shows that the overcrowded, artificial conditions, produced as they are by no end of things ugly, useless, and artless in their arrangements, are due to the lack of a definite standard, a want of restraint, and an unwise expenditure. Through constant contact with the forms of furniture prevalent about us, our senses become blunted and we fail to appreciate their mediocrity. The deplorable tendency to consider that everything that is in vogue or is recommended by the salesman is in good taste, leads us to purchase furniture which is not exactly what we want, but which must do after it is once purchased until we have more leisure



PLATE XXIII

to devote to a more careful search or more money to invest. It does not take long to outgrow these tasteless purchases, but our limited means prohibit our discarding them. It would be better to select one piece which has permanent value than three of flimsy construction, cheap finish, and ugly design for the same price. It is our lack of care in selection that causes the manufacturer to put on the market articles so bizarre, so striking, so loud as to arrest the eye at once. There is an abundance of beautiful things upon the market, but there is also an abundance of ugly things, things made with no other thought behind them than an intention to sell. The measure of success in selecting beautiful and harmonious furniture for the home is the measure of one's appreciation of what is fine in line, construction, and design.

In order that the homemaker may choose furniture intelligently, he must study the best periods of furniture-making, not that he may have a superficial knowledge of the history, nor that he may fill his home with period furniture, but that he may have a better understanding of what constitutes good lines and good proportion; of what distinguishes

solid, honest, direct construction from weak; of the adaptability of certain woods to construction, and of the appropriateness of their finish; of the breadth and simplicity of design which is an outgrowth of structural lines; and of the value of recurring lines which give enrichment, such as are found in delicate mouldings, skillful turning, inlays of various woods, and tooling which repeats structural lines. The past may influence one strongly, but there are many unworthy, positively ugly creations as well as many beautiful pieces of furniture in even the best periods of furniture-making, many evidences of decadence as well as of true growth. To gain a helpful knowledge of good construction and beauty, one must learn to recognize these qualities and to distinguish the good from the inferior.

In the brief space allotted to this important subject, only an outline of study can be suggested. Beginning with the Italian Renaissance, analyze the structural elements, lines, proportions, and shapes of spaces in each article of furniture, and the logical process of building in ornament. The changes wrought in the line of construction and in the shape and design came gradually, and furnish the keynote

to the principles underlying all good, honest, solid construction in the centuries of furniture-making which followed. Generations of work along one line led to the development of manual dexterity and of the ability to design. Decades elapsed before chests were elevated to sturdy cupboards or armoires, and the credence, conspicuous for its well-balanced proportions, to the cabinet with its nest of drawers and compartments within folding doors. It is not the charm of ornament alone that is essential, but the structural element in the comparatively simple form of the "carcass" or foundation of cabinets, sideboards, and other pieces of furniture. Trace the influence of these elements upon the cabinet-makers of France, Flanders, and England. Follow the influence of the Flemish designers upon the best periods of furniture-making in England, when the designers were artists as well as masters in architectural art. Such men as Hogarth, Van-dyke, and Rubens not only influenced the style, but also designed the furniture. Good design and construction in furniture reached its culmination in the best work of Adams, Chippendale, Hepplewhite, and Sheraton.



PLATE XXIV

The influence of the adaptability of wood upon design should be considered. The slow departure from the early Gothic and perpendicular, because of the nature of the grain of the wood, brought a direct, straightforward construction, sometimes limited in execution and clumsy in form. This gave way to graceful, shapely, sinuous curves, with proportions and materials lighter in weight because of the use of woods of finer, firmer grain. During the classic period of Adams and Chippendale in the reign of George III, the designers for the first time combined strength and delicacy by the introduction of woods characterized by these qualities.

The use and abuse of these ideas should be followed through the decadence of the Victorian period in England and a similar period in America. To the revival inaugurated by William Morris and his followers we are indebted for an aesthetic movement which has spread far and wide over many countries. The student should trace this movement in Germany and France, where it began with a movement known as *L'Art Nouveau*; and through this transitional stage to the development of a new style which promises to be one of great restraint,

beauty, and harmony in line and proportion. All this knowledge will give a student an understanding which materially strengthens his power of appreciation and his ability to recognize and choose good form and design in present day furniture.

CHAPTER XXI

PICTURES AND FLOOR COVERINGS

A. PICTURES



The one who has complete control over the choice of pictures which are to hang upon the walls of the house designed, finds that his very freedom in the

matter increases his responsibility in making the selection. While he is in no way compelled to use any picture he does not desire, he is held accountable for his mistakes in judgment in the same degree as he is given credit for his successful choice.

A picture is judged from many points of view. The untutored accepts and discards lightly because

of his unformed taste and in harmony with his whim of the moment. He is attracted by that which is obvious and often conspicuous, while the artist judges a picture by its technique, its composition, the manner of lighting, the method in which color is used, and the artist's conception of his subject. He recognizes many classes of pictures, and judges each according to the class to which it belongs: the decorative picture by the balance, grace, and beauty of the pattern and by the harmony of color; the representative picture, not only by its technique and composition, but by the artist's concept and interpretation of nature; the portrait by its decorative merit, masterly execution, or special significance, whether historic or artistic; the interpretative picture not alone by its technique, but according to the vision of an ideal which the painter awakens in others; the purely sentimental, which he condemns because their subjects are trivial and commonplace and their composition and technique without merit; and the literary picture, which has for its main object the telling of a story and therefore has as little claim to the name of art as the one which portrays with the literal truth of

a camera. The person who chooses the pictures for a home must recognize all of these classes and select those of permanent value to serve a definite purpose in a definite place.

There is no fixed rule by which one may come to know what is essentially good. Understanding and appreciation of pictures are a matter of growth. They can not be bought or sold, nor can they be passed on at will from one person to another. They must be evolved through intimate association with good works of art. The story-telling pictures, the sentimental pictures, the pictures readily comprehended, those that are self-assertive or insipid in subject, color, or technique, never give lasting satisfaction. Sooner or later the homemaker becomes weary of them and discards them or, what is worse, allows them to remain ignored on the walls, merely to fill space.

Pictures of real merit require time and effort to understand them. They never assert themselves nor in any way seek you. They yield their subtle qualities by degrees, growing steadily upon you and awakening a sense of deep reverence for the beautiful which is expressed through form, color, and

quality. The work of the master leaves no trace of effort in workmanship and needs no explanation for its presence. It has no mission to fulfill but that of being a joy to the artist, the musician, the writer, and the layman alike.

There is no surer way to increase love for the beautiful than by daily association with a few fine works of art. After a person has lived with them for a time, a few good pictures, well chosen and well placed, will grow in favor and will bring about a dissatisfaction with pictures which are without lasting merit. Many people give less thought to the selection and spend less money in the purchase of pictures for their walls than they do on their floor coverings. May not the message which comes to us across the centuries—"to sell bread to buy hyacinths to feed the soul"—be applicable to the pictures in the home? The constant association with a good color reproduction of an old master, or a plaster replica of the best of Greek or Renaissance marbles is of necessity uplifting. There is but one thing in the home that adds more to its dignity and culture than a fine work of art—that is, books that *are used*.



PLATE XXV

Good oil or water-color paintings by good local artists are sometimes within the reach of one with limited purse. No home need be void of color in pictures, for recent processes of reproducing with wonderful accuracy make it possible to secure at low cost reproductions of both old and modern masters. The variety of subjects gives ample opportunity for a wide range of choice in selection. Take for example, the long list of portraits. Rembrandt's *Women*, *the Scribe*, *the Man with the Helmet*, all marvels in their richness of color and light; Franz Hals' more jovial and human people; Velasquez's dignified, courtly people; and Vermeer of Delft's *Lady with the Pearl Necklace*, *Girl Reading the Letter*, with their simplicity of composition and glow of quiet color, will be found more than restful in the home. The more modern portraits of Manet, the *Boy with the Sword* and the *Woman in Grey*, and of Whistler's *Girl at the Piano* and *Little Rose of Lyme Regis* are quiet and harmonious in color. If desired, more sparkling color may be secured in the portraits of Zorn and other Scandinavian painters. There are many other inexpensive reproductions that can be secured in

both color and carbon, as for instance in the Braun and the Guerin prints, in the Baumann wood-block color prints, and in the Maxfield Parrish prints, all excellent in artistic merit and in execution. The charm of color and the decorative quality of good Japanese prints are enhanced daily in the eyes of the one who lives with them. These are especially satisfactory and restful in a bedroom. Holbein's red crayon drawings of Jane Seymour, Anna of Cleves, Duchess of Suffolk, and others are also desirable for bedrooms.

The examples quoted above are only a few of the many representative pictures of excellent quality suited to the home. It is my desire to call attention to the opportunity one has of choosing inexpensive pictures of marked individuality for homes where original works of art cannot always be possessed, and to the possibility of wider divergence from the popular and routine choice of trivial and commonplace subjects. What is of supreme importance is that the picture chosen shall be good of its kind, that it shall be a perfect piece of decoration on the wall, and that it shall be chosen because it is in harmony with the other pictures in the room.

B. FLOOR COVERINGS



Before a homemaker can make a selection of floor coverings, it is wise to consider rugs and carpets from the point of view of their manufacture and distinguishing characteristics, in order that she may acquire sufficient intelligence to judge

them on their merits and to make a rational choice among them.

Carpet-weaving preceded the making of rugs and arose among a people who lived in tents. Carpets were first used as ornaments, such as hangings and coverings. They were made by hand by people who had time, patience, and love for the beautiful in common things; the designs, elementary in form, were suggestive of leafage, flowers, beasts, and birds. The beauty of these carpets came through the fas-

cinating combinations of colors in contrasts, used in an ingenious arrangement of patterns that lie absolutely flat without modeling or shading, and are carefully outlined. The charm of these hand-made products lies in their expression of human imagination and in the passing inspirations that are recorded in the designs and the modulations of color.

The hand-made rug follows the same design as does the hand-made carpet. The plan consists of a series of narrow borders varying in width and design, with a principal one, wider than the others, surrounding a field. The field is seldom empty. It is broken in various ways, sometimes by one or more medallions which vary in shape and size, and sometimes by the repetition of floral or geometric patterns. It is frequently broken at the corners by angles, or, as in the prayer rug, by the conventional arch of a Mosque. This general plan of the oriental rug has become the customary plan for all modern domestic and machine-made rugs.

The wool required for rugs and carpets must have a firmness and strength to give weaving and wearing qualities, entirely different from that of the soft, fine wool required for cloth. Wools for

carpets are chosen from mountain sheep that are exposed to the rigors of severe climates, because their wool gives strength and toughness that cannot be secured from sheep in a warmer climate. This wool is washed repeatedly in clear running water to remove all animal oil, and is spun, carded, and dyed in vegetable dyes which give subdued richness and glow in color. In the western countries, the chemical and mineral dyes which are generally used give harsher and sometimes cruder colors. In machine-made carpets and rugs, the wool for the warp is spun tight and the weft fine, and when spun, it is put into skeins and dyed; the pile is heavy and loose.

In spite of the fact that machine-made rugs always lack the charm of invention and the individuality of the oriental rug, artistic merit and beauty are to be found in many of them. The colors and designs are sometimes similar to those of the hand-made, except that the colors are limited to six or eight hues, and the patterns are mechanically accurate, and are repeated at regular intervals. The Hand Tuft rugs are made after the method of the oriental, with knots tied by hand, in any color or

design, without seams, and with a deep pile. These are luxurious in texture and are high priced, possibly because of the cost of labor in European countries as compared with that of the Orient. The more commonly used Axminster has a loose weave similar to that of Chinese rugs and can be procured in Chinese patterns and in a few oriental designs. It is made of the finest of wool, with cut pile, and in every color. For many years the Wilton has been a serviceable rug because of its wearing qualities and its design. It is made of an excellent grade of wool, which is first dyed and then closely woven over wire. A knife at the end of the wire cuts the loops as the wire is withdrawn, giving a close, full pile. The Wiltons are popular because of their close reproductions of a few designs in oriental rugs. However, they are mechanically correct in detail and shape, and their color lacks the charm, richness, and strength of the oriental. The velvet rug is an imitation of the Wilton Body Brussels, wears well, is easily cleaned, and is not expensive. The pile consists of uncut loops, and the pattern is limited in the number of warps used and to the use of six colors. Body Brussels can be obtained in

quiet colors and in good modest designs. Tapestry Brussels, an imitation of Body Brussels, is printed by machine after it is woven, therefore often having a blurred appearance. The Smyrna is double-faced and reversible, has a thick cut pile, and is woven in one piece. The best grades follow oriental designs.

Rugs or carpets which have no pile are made of double cloth with the face pattern reversed on the back, as may be seen in ingrain, Scotch Art, and others. Excepting a few designs by William Morris and a few others, the ingrain carpet has much pattern and little artistic merit. Terry or Fillings are plain ingrains in solid colors, and like the Scotch Art rugs, wear well but spot easily. Jute, mattings, and grass fibres are desirable for summer and are adapted to all surroundings. They have proved a practical covering for rooms which are little used, sometimes even for a living room, library, or bed room, and are clean and inexpensive. The rag rug has no pile, the body being formed by a thick weft. The simple, plain rag rug is especially desirable and serviceable in bed rooms and bathrooms. It is inexpensive, is easily cleaned, and may be artistic.



PLATE XXVI

Purchasers are attracted more frequently by color and design than by durability. The same care should be exercised in choosing a floor covering as in deciding upon all other furnishing; that is, its relation to the walls, the room, and the furniture must be considered. A rug may be beautiful in itself and yet out of harmony in color, design, or quality with all other articles of furnishing in the room. It is a safe plan to choose a rug with a quiet field and a design small, simple, and unobtrusive in shape, color, and value. Restless, vigorous, and pronounced designs; naturalistic forms such as animals, birds, or flowers, modeled and shaded; or strong contrasts in color in the floor-coverings, become the center of interest of a room: that is, they are so pronounced that they attract and hold the attention. A rug should be the lowest value in the room, and should attract least attention, though it may have a glow of color like a mosaic, quiet and subdued. When a sense of economy prohibits the discarding of a self-assertive rug, it may be dyed black or a quiet neutral color, as in Plate XXVII.

The size of the rug has a great deal to do with

the appearance of the room. Many small rugs make a room appear smaller and chopped up, while one large rug or carpet increases the size of the room. Floor coverings which give a quiet glow in color and are inconspicuous in design and low in value will hold the furnishings of the room together and add dignity to the whole.

CHAPTER XXII

COLOR IN THE ROOM



Bismarck declared that he could make no plans in a room where the colors were inharmonious. Most people realize that a room is cheerful or depressing, inviting or repellent, but few are aware that these qualities are directly dependent up the kind

and intensity of the color used. The beauty of a room depends upon its color, which includes the walls, wood-work, carpets, rugs, draperies, furniture, pictures, and ornaments.

The principles of color correspond to those of melodious sound. It is impossible to produce the best effect with one tone, and just as impossible to produce the most melodious sound by harsh con-

trasts. It is the skillful manipulation of tone contrasts in harmony, even the judicious opposition of tones, that produces the greatest harmonies in color. But color tones, unlike music, are permanent. They are not lost with the passing moment, but remain a constant delight or discomfort. If colors are not balanced in the same big way in which we balance contrasting forms, the scheme will be lost.

The first impression of a room depends upon the walls. No amount of richness and beauty in rugs, pictures, furniture, and draperies will redeem a bad wall. It is easy to distinguish a very good or a very bad design in wall-paper. But the manufacturers produce quantities of paper that are "almost good." How is one to discriminate and discard quickly all mediocre designs? There are three types of bad wall paper. The first type is found in papers that suggest different planes, as if one part of the wall were nearer than another. This type of bad design appears in many forms. It is found in all designs of leaves and foliage expressing planes which give an undulating, wavering appearance to the surface of the wall, and should be discarded no matter how beautiful the color. Landscapes

portraying distant fields, forests, streams, and clouds, or set in fantastic scrolls, or those in broad decorative masses of different values, all expressing planes, should be avoided. Designs of trellises with trailing vines and fruits, festoons and garlands of flowers, bow-knots of ribbons, self-assertive stripes, and baskets of fruits must be avoided for the same reason. One is deceived by the beautiful colors, the play of light and shade, and the naturalistic clusters of flowers and fruits, forgetting that the literal portrayal of any nature form on a wall is a direct violation of design here just as it is in lace or textiles. A decorative form suggesting a flower, in a value almost imperceptibly removed from the background, may be used. But the charm of the simplest flower is lost when it is seen regularly repeated at short intervals over yards of surface.

The second type to be discarded is made up of conventional, geometric, and heraldic designs, which are pronounced in form, value, or color, or in all three. The units may be faultless so far as design is concerned, but when placed upon paper so that they run vertically, horizontally, or diagonally, they become intolerable. They appear like so many

spots when repeated hundreds of times over a wall, and are offensively obtrusive and often nerve-racking when they peer from behind pictures, and above and around furniture. A good design is often ruined by being printed in values too strong for the background. This is not noticed in a small sample, but is objectionable when repeated without relief over the four walls of a room.

The third type of paper to be discarded is that having the mottled effect suggestive of a water-color wash put on unevenly, as if by a bad workman. Walls are flat surfaces expressing only length and height, and must remain flat, no matter what is put on them. There must be no suggestion of depth or distance, no self-assertive shapes, values, or color, if pictures are to hang against them. All paper characterless in design and neutral in color, approaching a flat, even tone, is a safe one to choose. Walls must remain as backgrounds, not only for pictures and furniture, but for people. When we permit wall and floor coverings to dominate the room and its occupant by means of their pronounced designs and strong colors, we are violating every law of good taste.

Wall papers should be in harmony with the color of the wood-trim in the room, as well as with the color in adjoining rooms. They should have something of the same warmth or coolness of color that is found in the wood-trim. For example, *cafe-au-lait* colored paper will be in harmony with soft grey brown, natural walnut, and red gum, but will be out of harmony with yellow pine or golden oak, for the cool grey of the paper emphasizes the yellow in the woods. On the other hand, the yellow in pine or golden oak can be neutralized and properly subordinated by the use of a soft brown paper of the same hue as the pine, only slightly greyed, for the yellow in the one counteracts the yellow in the other. All wall-papers appear several values darker when put on the wall in unbroken masses. For this reason, it is wise to choose a paper very high in value. Any color above middle value reflects light and increases the apparent size of the room, while all values below middle absorb light and make a room appear smaller. Sharp contrasts between side walls and ceiling are rarely pleasing; for example, a strong red wall and a cream ceiling. There is a truth in the statement that a light ceiling makes a

lighter room, but the contrast between it and the wall should not be aggressive.

Draperies have a three-fold purpose: to exclude sunlight, to provide privacy, and to give color to a room. One needs to consider not only the quality and flexibility of the drapery, but its durability and the manner in which it can be cleansed. Certain English chintzes, Austrian linens and cretonnes, French chambrays, Japanese crepes and towelings, and other materials of fast colors are washable, and by means of their transparency transmit color, light, and glow into the room. They are appropriate for both dining rooms and bed rooms. They are inexpensive and can be obtained in good designs with a wide range of colors from quiet, neutral tones to sparkling colors. Heavy silks, brocades, and tapestries which are flexible and yield to graceful folds are desirable for living rooms. Materials that are stiff and wiry, and wools which attract moths are not desirable. Figured, plain, or striped draperies are pleasing with plain walls, but the balance is lost when figured draperies are used with figured walls.

Draperies are most pleasing when hung straight,

without valance and without draping. A horizontal flounce or valance across the top of the window decreases the height of the window and should be avoided in a low room or on a low window. A valance may be used only on windows of great height, as in Plate XIV. The problem of hanging draperies in the bay window in this illustration is worth considering. Three sets of lines were plainly visible from all parts of the room: the horizontal lines at the top of the semi-hexagonal bay-windows, which were eleven feet high, the pronounced vertical lines of the deep casings, and the curve of the arch leading into the bay. The conjunction of these structural lines as seen from the room was distracting. The use of the deep valance not only shortened the great height of the window but hid the objectionable lines of construction.

As stated, there should be a similarity in tone between wall-papers and wood-trim, but there must be contrast in color between wall paper and draperies. For example, suppose one chooses a light, grey-brown drapery to be used with light grey-brown walls and wood-trim. This produces a dominant harmony which is monotonous and will

require some very pronounced and assertive color elsewhere to relieve it. The beauty of a harmony in contrasts could be secured if contrasting colors, such as a sap green, a green-blue, or an apple green approaching emerald, were used in the drapery. The fewer colors one uses in a room the better the harmony. A successful room is one which is kept almost neutral in the color values of the large masses of furniture and walls, and is given charm and glow by the use of one or two notes of contrasting color. Let the pronounced color come in draperies and be echoed in small quantities in different parts of the room, as in page 202.

Which rooms need subdued colors, and which require bright ones? Warm colors intensify heat and reflect warmth. A room facing north may be made to glow by the proper use of warm colors. Yellows verging to orange, orange-reds, poppy reds, transparent ambers, brilliant red-browns, and golden browns, which are highly desirable in a sunless room, would be unendurable in a sunshiny room on a warm day. Joseph and Elizabeth Pennell in *The Life of James McNeil Whistler* describe a room that Whistler decorated as "one of those prim-



PLATE XXVII

rose yellows which seemed as if the sun were shining, however dark the day." To provide refreshing contrasts to the glare or heat of the sun, a room with a southern exposure needs cool colors, such as peacock blues, heliotropes, blue-violets, dull lavenders with blue shadows, olive or emerald greens, dull blue-greens, and deep blues and grey-blues. Colors at their fullest intensities should be used only in small quantities.

There are many schemes of brilliant colors which when discriminately brought together will enrich and add charm to a room. A room of striking contrasts of color daringly used is one with walls of a soft brown not unlike the tawny color of the sun-burnt bloom of bluegrass. The floor is of a darker value than the walls, and four large-paneled colonial doors are painted an apple green, brilliant but not crude. The chairs are ebony, with mellow purple velvet cushions. The only pictures on the walls are Japanese prints with vigorous lines of black amid their coloring. The scheme is daring and successful. A room of quiet contrasts is that in which the walls are *cafe-au-lait*, with mulberry draperies, dark grey rugs, and ebony furniture. Still another

has walls of a soft grey, dark grey and violet floor covering, blue-green upholstery on walnut furniture, and heliotrope figured draperies. The use of painted furniture brings color into a room. A room has recently been completed with grey-violet walls, walnut wood-work, cream net curtains with an over-drapery of deep violet-blue velour suspended from a copper rod, and most of the furniture painted with vermillion enamel, one or two pieces being painted in a complementary color, a grey-green. This room, which is subdued and rich in its color, opens into a room aglow with mellow buff.

There is a certain quality in a room which can be designated only as glow. It is the result of perfect balance in the neutrality of the background, and the use of softened yet vivid color. Sometimes we find this glow in stained glass, more often in oriental rugs. For this reason oriental rugs of good color are more necessary in a living room than fine furniture. Such a rug all by itself can give tone to a room with any kind of furniture, from mahogany or rattan to golden oak, provided the lines of the furniture are unimpeachable. With strong color in rugs, furniture and walls must not intrude,

but must retire to a dim background.

We sometimes see rooms with a glow of color in which no oriental rug is used. A specific example of such a room is one which has wood-work stained dull grey, waxed, not polished. The walls are also dull gray. The windows have overdraperies of dull blue hung straight. Around a dull red brick fireplace is a mantel of grey wood. The pictures in dull gold frames are faded in tone. The furniture is grey brown, and some open bookcases run along two walls. So far with a single exception of the red brick fireplace there is nothing that counts for color, yet the room is aglow. Nothing gives a richer effect in actual color in a room than the variegated colors of the backs of books. They are as charming as an oriental rug, and the open shelves add to the charm.

The main thing, then, in the arrangement of a room is the striving for the best, the most harmonious result that can be obtained. One way to accomplish this is to arrange continually, building one experience upon another, in an earnest effort to secure finer relations, finer proportions. Let us have rooms which once arranged are always beautiful;

rooms which can form backgrounds that are fitting and dignified not only *at the time* we see them, but later in *our memories*; rooms fit to be homes in the fullest sense of the word; "rooms that shall in no way embarrass our friends, ample enough to contain them, simple enough to leave them unoppressed, yet with artistry to please, and to lead them, if they would, to do likewise."

TO THE TEACHER

The need today is to give art its proper place in the life of every individual and in the community. We need to make art so real, so vital that the student, not only while he is with us but after he has left us, works both consciously and unconsciously from principle as well as from a sense of beauty. We need to help the student to establish within himself a sensitiveness to beauty in proportion, form, color, and balance, which shall serve him as a working basis not only in the problem at hand but in the discriminating exercise of good judgment in whatever direction his calling may lead. We need to help fix in his mind the fact that "beauty is the most useful thing," and should be the commonest, not the costliest, thing we know.

Give the student a practical experience in arranging a room. A collection of furniture, pictures, casts, rugs, books, and pottery may be placed in the classroom. With these materials each student should have the opportunity to arrange a wall beautifully in accordance with the laws of balance, good spacing, and harmony. The result may then be criti-



PLATE XXVIII

cised and discussed by the class, and necessary changes in arrangement may be made. Plates XIV and XVIII show two views of a room in an old mansion which was decorated and furnished by students in a competitive contest. The best design was chosen and carried out in every detail. Such work may extend to the actual rearrangement of a room in each student's home, though this, of course, can not have the teacher's direct supervision.

The student should make repeated visits to the different dealers in furniture, pictures, domestic and oriental rugs, wall papers and draperies, bed and table linens, chinaware, pottery, and kitchen utensils. He should endeavor to choose for his project materials, utensils, and furniture, the quality, usefulness, and beauty of which should determine their fitness. Each student should keep a carefully itemized account of each supposed expenditure. He must place nothing in his elevations or in his itemized accounts of expenditures that he has not found in the stores. As he enlarges his experience and trains his judgment, he finds the limited sum allotted to him to spend a stimulus rather than a detriment. The solution of the problem of maintenance and

the preparing of budgets of clothing and food for the family of five for one year, mentioned in the first chapter, should be an organic part of the course. So closely allied to the real problem of life is this, that a student goes beyond mere representation in this concrete expression of his ideals. Whatever the outcome for him in the future, his mind is aroused and his imagination quickened to the true usefulness of art.

